

University of Salford

Business School



PhD Thesis

A service marketing approach to recruiting students in German private universities:

Exploratory thesis of student expectations and experiences

Author: Stephan Platz

(ID @00215787)

Dissertation Supervisor: Dr. Jonathan Swift

Acknowledgement Page

I would like to thank my supervisor Dr. Jonathan Swift. It has been an honor to be his first German Ph.D. student. I appreciate all his contributions of time and ideas. I am also thankful for the excellent administrative support by the University of Salford especially by Mrs. Michelle Jones.

Finally, I would like to thank my parents and my sister for their continuous support. Furthermore, to thank both the University of Hamburg especially Mrs. Prof. Dr. Berg and the private University in Hamburg for carrying out my survey at their institution.

Abstract

Changes in the higher education sector have forced private universities in Germany to reflect how they can best compete in the market, attract students, find their market niche and differentiate themselves from similar institutions. The recruitment of students at private universities is particularly difficult. This study explores which factors influence their selection and evaluation process. In order to better understand students' expectations and experiences, the study compares the selection criteria of students at state and private universities. The results indicate the criteria which are relevant for students for and after enrollment at state and private universities in Germany. Undergraduate students have often unrealistic expectations and therefore are often disappointed about their chosen university. The analysis of private university students' selection criteria is important, as marketers can specifically develop and address their expectations and needs. The study reveals that different types of students apply different criteria for selecting and evaluating private universities. Based on an empirical study of 152 students at one state and one private university in Hamburg, the thesis shows similarities and differences between the selection and evaluation phases and between the two types of higher education institutions. The statistical outcomes are based on a descriptive, a bivariate, an explorative factor and multivariate regression analysis. The developed conceptual recruitment and marketing model will support recruitment strategies at private universities. The study derives important implications for strategic marketing and management activities and student satisfaction management of higher education institutions in Germany. Moreover, recommendations for future studies are outlined. The expectations and experiences of students have not been analysed in depth at private universities in Germany. Data or studies which analyses the students selection and evaluation process and determine different types of students are missing for German private universities. Furthermore, reliable studies which also compare the selection process for private and state universities in Germany are missing. Thus, the study helps to fill this important gap. Secondly, and on a practical nature, it is hoped that the study will provide higher education practitioners with empirical evidence that can be used in future recruitment strategies.

Key words:

higher education institution, student recruitment, student types, university marketing activities, strategic management of private universities in Germany, private university Germany

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1. Problems, Objectives and Structure

1.1 Problem and Objectives

The rising number of private universities and the increasing number of students at private universities in the last 20 years reflects the changes within the education market in Germany (Buhse, 2014; Destatis, 2014; Statistisches Bundesamt, 2013). Most of the private universities have been founded since the 1990s. State universities have in general more tradition and are more established in Germany. While many state universities were founded in the 17th, 18th, and 19th centuries, the majority of private universities are less than 20 years old (Bildungsbericht, 2014). This development has led to competition between state and private universities and to a growing interest in the effective marketing and management of higher education (HE) institutions (Obermeit, 2012). In particular, private universities are interested in learning more about students' selection processes and their expectations and experiences (Darraz et al., 2009).

Because of the changes in the higher education sector in Germany, higher education institutions have to think about how they can compete in the market, attract students, find their market niche and how they can differentiate themselves from similar institutions (Meffert and Müller-Böling, 2007; Nickel, 2009, Buhse, 2014). Thus, the current development of the German HE market offers interesting research topics about the importance, expectations and performance implications of service marketing. Moreover, the relevance of the topic results from the fact that the number of students in some German federal states is continuously rising. 68.500 students are studying at private higher education institution in the German Federal State North Rhine-Westphalia alone. Depending on the location and reputation of the institution, the tuition fees account from 12.000 € to 24.000 € for a Bachelor programme (Beschornier, 2014). Taking this into account, it becomes obvious that the topic is also relevant from an economic perspective. Another reason for the relevance of the topic is the large variation of German state and private universities. Currently 272 state universities and 110 private universities with different size, study focus and financial background exist in Germany (Appendix 1). Around 65 private universities offer degree programmes in business administration and management while the others offer subjects such as healthcare, design, arts, etc.. While state universities are financed by the government, the majority of private universities rely on tuition fees. Just a few of them have strong sponsors or patrones, such as the KLU University (Hamburg), and the HSBA (Hamburg) are entirely not depending on tuition fees.

Private higher education institutions try to attract students through unique customer focus, networks, better education conditions and learning environment. They have recognised the desire of future students about getting a secure work place and high future income. In order to achieve this, they have increased links to companies, developed dual study partnerships and provide students with intensive internships to educate them to be more practice-orientated. Such a strategy helps students to increase their employability and institutions to improve their image and reputation. Practice-orientated study programmes are becoming more popular at private universities in Germany (Frank et al., 2010; Statista, 2015). Also more and more companies seek to establish close links to HE institutions and to support their programmes with content from the business world; often universities develop study programmes together with companies. Those degree programmes are more technical and professional-orientated and include as well contents, such as soft skills and interdisciplinary methods (Frank et al., 2010).

In this context, an interesting approach is the dual study programme. The dual study programme is becoming increasingly more attractive for students as they combine a bachelor degree with a company traineeship of three years. An advantage of such programmes is that most companies plan to hire their graduates after finishing their dual study programme on fulltime basis. In 2009 around 960 dual bachelor students started such a programme in mechanical engineering, management, logistics, information technology and economics at Volkswagen in Germany (Volkswagen, 2014).

Dual study programmes in Germany have several advantages. The Dual University Baden-Württemberg (DHBW), for example, lists the following advantages over regular state universities which are not offering those programmes. Students who are studying a dual degree programme are from their first day of study financially independent. They are paid a monthly traineeship salary between 600-1000 €, depending on the company. The dual study system is organised in practical and theoretical periods. Furthermore, dual students are regarded as employees of the company and thus receive health and unemployment securance (DHBW, 2014). Another motive for students to choose a university which is offering a dual study programme is the key aspect of a future workplace at the company and their employability on the job market. Companies are looking for good graduates with decent work experience. Other positive aspects are small classes and lecturers with professional practice. Furthermore, companies offering a dual study programme work closely together with private universities to im-

prove quality standards (DHBW, 2014; Statista, 2015). Most private universities rely on tuition fees and choose company relations. If companies pay the tuition fees of their students, for example, in the term of dual study programmes and also support the institution financially, it increases the likelihood of private universities to become profitable and competitive. Critics mentioned that companies may accrue much influence and private universities which offer a dual study programme are less independent than state schools (Riße, 2013).

However, without satisfied students who are continuously paying tuition fees, long-term survival would be impossible for private universities. Because of that, mentoring programmes such as career centers, international offices or regular meetings with staff are very important at private universities. To regard students and companies as customers and to satisfy their needs and demands is one of the main aims of private institutions. However, they also have to find a mixture between the wants and needs of students and the requirements of academic standards (Tuttle, 1997; Nolte, 2010).

Despite their growth in numbers over recent years, private German universities are still much behind equivalent institutions in the UK in terms of generated revenues and the number of EU and overseas students (Angell et al. 2008; Statistisches Bundesamt, 2015). The Higher Education Funding Council for England (HEFCE) forecasted that the revenues of English universities will increase from 8bn pounds in 2012/13 to 9.1bn pounds in 2014/15 (Huxley, 2013), while the revenues of private universities in Germany are still neglectable.

In contrast to private universities, a unique feature of German state universities remains the fact that students do not have to pay any tuition fees for their study programmes. Because of that, most German students study at state universities. Private institutions try to attract students purportedly with better student liaison and more interactive teaching due to small classes and more intensive mentoring by lecturers and professors. Further examples are better career networks and educational environments. Deregulation and increased competition within the public sector and between public and private providers are creating a more market-like environment which influences how universities and colleges profile themselves and compete for students (Maringe and Gibbs, 2009). Excellence and diversity are key issues for consideration when developing their institutional profile. Furthermore, promotion of excellence will help higher education institutions to prosper in an increasingly open and competitive environment (Frølich and Stensaker, 2010: 2).

As a consequence, it may be expected that higher education institutions will shift their focus from a product-orientated to a more customer- and service-orientated approach. For important career decisions like choosing the best-suited higher educational institution, the current service quality of the institutions plays a significant role (Hachmeister et al., 2007; Sultan and Wong, 2013). To ignore the benefits of enhanced service quality and not managing the service quality and service marketing effectively will be a competitive disadvantage and effect the ability to recruit students negatively (Angell et al., 2008, Sultan and Wong, 2013). Next to student selection, another important aspect of both private and state universities is marketing their services. Therefore, it is vital for any private university to explore which determinants influence the decision-making process of students about their higher education institution, to identify the existing demand in the particular target market and to develop marketing activities that are directed to meet the expectations of different target groups (Obermeit, 2012; Kotler and Keller, 2009).

Although some studies about how students select their higher education institution exist, they are characterised by several shortcomings. Most studies were not carried out in Germany and do not consider the student choice for a private higher education institution. Instead, previous studies have mostly been conducted in the UK and the USA, and it is unclear whether their results are transferable to Germany, given the fact that both countries have a higher education system that is significantly different to that of Germany. Furthermore, the expectations and experiences of students at private higher education institutions have not been analysed in Germany in depth. Thus, reliable data or studies which compare the selection process for private and state higher education institutions in Germany do not exist (Obermeit, 2012).

Thus, the identification of the relevant dimensions of service quality and the development of a holistic conceptual marketing and choice model which is able to measure, evaluate and determine factors and criteria of students decision processes about higher education institutions are an interesting and relevant research objective (Nickel, 2008; Frank et al. 2010; Frølich and Stensaker, 2010; Obermeit, 2012; Sultan and Wong, 2013).

Conclusion

In this context, this study aims to explore students' expectations and experiences as well as to find out about the relevance of different selection criteria of types of students. Furthermore, the study will suggest how to adapt the marketing strategies to specific target groups at private universities. This is important because undergraduate students often have unrealistic ex-

expectations of their chosen higher education institution. Those unrealistic expectations lead to disappointment. Information about the expectations and experiences of students are therefore very useful for universities. Furthermore, the higher education marketing literature revealed that no studies have been conducted which point out and utilise student focus groups (Armstrong and Lumsden, 1999). The outcomes of the study will help private universities to develop effective recruitment and marketing strategies, to identify their unique selling points and to position the institution in the market. Private universities which are able to increase applications improve their image and reputation, operational efficiency and finally their financial performance. Therefore, student satisfaction is becoming increasingly more important for private universities in Germany.

1.2 Research Questions

Based on the above considerations, the aim of this PhD thesis is to propose a conceptual model of marketing and recruitment in the context of private universities. To explore important components for qualitative interviews, a quantitative survey and a holistic service marketing concept will be carried out. In particular, the following research questions, based on the gaps in the literature review, will be addressed:

1. What are the most relevant selection criteria for students in their decision process for a private university? Does the identification and evaluation of selection criteria differ between different target groups?
2. Do these criteria differ for student recruitment, and if so, how might this be used to form recruitment strategies by private universities?
3. Can different types of students be identified who regard different criteria as relevant when deciding for a private university? How can private universities adapt their market segmentation and marketing mix to specific target groups?
4. How can private universities in Germany improve their marketing activities in order to recruit and keep qualified students? How can relevant information about students' selection strategies be integrated in a conceptual model of marketing and recruitment at German private universities?

1.3 Structure of the PhD Thesis

The PhD thesis starts with a description of the current problems, objectives and new structures in the higher education sector in Germany. An important outcome of chapter 1 is the identification of research gaps within the literature. Chapter 2 describes the German higher education sector. Recent trends, problems, similarities and differences between state and private universities will be outlined. Chapter 3 considers theoretical considerations such as service selection processes, service quality and service marketing in higher education in Germany. Several empirical studies and methods of the higher education sector in Germany will be discussed and analysed. Furthermore, internal and external marketing at higher education will be discussed. Chapter 4 addresses the methodology and the research design of the thesis. Chapter 5 contains a quantitative study of student expectations and experiences. On the basis of the quantitative study, chapter 5 discusses different statistical methods such as a descriptive analysis, a bivariate correlation analysis, an explorative factor analysis and a multivariate regression analysis. Chapter 6 includes the institutional perspective in form of expert interviews. Chapter 7 discusses a conceptual marketing and recruitment model for private universities in Germany. Chapter 8 answers the research questions, gives implications and points out the limitations. The study finishes with a list of references, followed by appendices.

2. Institutional Background: The German Higher Education Sector

2.1 Structure and Recent Trends in the German University System

The German university education system is currently undergoing significant changes which have led to a weakening of traditional state universities (Meffert and Müller-Böling, 2007; Stifterverband, 2010). These changes have been initiated by the Bologna process which implicates a common development of the European university education system in 1999 (Voss, 2004, Obermeit, 2012). The reorganisation of the degree system should give students more flexibility and better perspectives to study in Europe. Another aim is the improved comparability and standardisation of academic degrees in the European Union. In accordance with the Bologna declaration, Germany has introduced a new degree structure. The former Diploma system was replaced by a system that finishes with a three-year Bachelor's degree and a two-year Master's degree (Voss, 2004; Stifterverband 2010). This new structure is a key component of a general higher education reform which has increased institutional autonomy, strengthened private higher education institution's strategic capacity and introduced performance-based funding (Gate Germany, 2010). Aims of the process were the stimulation and encouragement of the international competitiveness of European universities, the implementation of a standardised degree system and closer collaboration of European universities (Frølich and Stensaker, 2010). Moreover, the customer orientation of higher education institutions and the employability of graduates should be increased.

2.1.1 Similarities and Differences of State and Private Universities in Germany

Table 1. Development of student numbers at state and private universities in Germany

	1995	2000	2005	2009	2010	2011	2012	2013
State Universities	1.816.115	1.751.775	1.906.442	1.999.909	2.083.257	2.228.984	2.333.765	2.429.709
Private Universities	15.948	24.574	54.000	97.284	108.728	125.083	137.814	157.899

(Source: Destatis, 2013; Federal Statistical Office Germany 2013)

Table 1 shows the development of student numbers at state and private universities in Germany. It can be observed that the student numbers at both state and private universities have increased. Currently, nearly 2.5 million students are enrolled at state universities and 157.899 at private universities (Table 1). While the number of students at state universities has increased

by 33 percent since 1995, it has nearly multiplied by ten percent at private universities. In 2013, 463.046 individuals matriculated at state universities, compared to 39.305 at private institutions. While in 1995, less than 1 percent of all students in Germany were enrolled at a private university, this number has increased to more than 6 percent in 2013 (Table 2).

Table 2. Intake of new students at state and private universities in Germany

	1995	2000	2005	2009	2010	2011	2012	2013
State Universities	254.465	4.102	337.026	393.066	412.232	480.802	454.201	463.046
Private Universities	2.729	5.818	13.956	26.045	26.681	31.681	34.902	39.305

(Source: Destatis, 2013; Federal Statistical Office Germany 2013)

It can be noticed that state and private universities increased their intake of new students each year (Table 2). However, it is interesting to note the development of intakes of new students at private universities. Just 2.729 intakes of new students can be observed in the year 1995. In contrary, 39.305 new students started their studies at a private university in 2013. In addition, the level of student intakes is steadily high at state universities. 200.000 intakes of new students can be observed between the period of 1995 and 2013.

Differences are the much higher number of students at state universities, the early foundation of state universities and the right to award a doctorate (appendix 1). Private universities just have the right to award a doctorate if they have similar quality standards and if they are research driven (Gillmann, 2009). Therefore, just a few private universities are allowed to award doctorates; By contrast, the majority of state universities have the right to award doctorates. A high percentage of private universities were founded in the early 1990s. They were founded in response to the stagnation of the state universities. Overcrowded lectures, inadequate links to companies and in the end students' feelings of less employability helped the growing private university sector in Germany (Bildungsbericht, 2014). The private universities that were founded in the early 1990s up to 2014 are highlighted in appendix 1. The average number of students in each is much smaller and only a few of them have the right to award a doctorate. Most private universities are specialised in business administration and management, and many of them are supported by large companies or wealthy sponsors or patrons. The most prominent ones are the Kühne Logistics University Hamburg, the Steinbeis University Berlin and the Jacobs University Bremen. Similarities of private and state universities are often similar to Bachelor and Master programmes especially in subjects such as busi-

ness studies and management. However, major programmes are just state recognised and the private universities have to improve their quality management systems. Therefore, mentoring and the conditions of studying have to be similar to those of state universities (Maaß, 2013). Private universities tend to select students by assessment centers and interviews instead of just the A-level grade. State universities select their students by their grade of A-level. Critics pointed out that the entry barriers are low at private universities and therefore a homogeneous group of students' can not be established (chapter 6.1.3). Another perception is that students at private universities finish their degree easier because they pay tuition fees, and therefore receive more help and mentoring during their period of study. The German Council of Science and Humanities (Wissenschaftsrat) disagrees and points out that the majority of private universities have high standards and that students have to study for their degree as hard as state university students (Thurau, 2012). A strong proof of a high quality standard of a private university is a certification by the German Council of Science and Humanities (Wissenschaftsrat, WR).

Furthermore, table 3 illustrates further differences and key characteristics of state and private Universities in Germany.

Table 3. Key characteristics of state and private universities in Germany in 2014

Key Characteristics	State Universities	Private Universities
Number of institutions	272	110
Average size (number of students)	2.429.709	157.899
Average age of the Institutions (in years)	93	19
Universities with the right to award a doctorate	124	17
Number of international students (average percentage)	11.5%	0.3-2.1 %

(Source: Federal Statistical Office Germany 2013; Statistisches Bundesamt, 2015)

2.1.2 Quality Standards at German Private Universities

The German Council of Science and Humanities prepares reports and gives recommendations for example to private universities how they have to align their strategy to receive and to keep the German Council of Science and Humanities certification. As the German Council of Science and Humanities pointed out, the council is “one of the leading science policy advisory bodies in Germany. It advises the Federal Government and the governments of the German Länder (Federal States). It produces recommendations on the development of science, research and higher education, thus helping to ensure that German science and humanities remain competitive at national, European and international level. The recommendations of the Wissenschaftsrat involve considerations concerning quantitative and financial effects and the implementation of such considerations, always taking into account the demands of societal, cultural and economic life” (Wissenschaftsrat, 2014).

How important institutions such as the German Council of Science and Humanities are, is highlighted by the increase of private universities from 23 institutions in 1990 to 108 in the year 2012 (Burchard, 2012). The German Council of Science and Humanities ensures that minimum standards in quality management such as teaching, research and educational programme have been considered by a private institution. A certification of the German Council of Science and Humanities is a good orientation for students for choosing a private university. External experts such as professors or administrative employees of other universities monitor the standards and evaluate whether the private university fulfills the requirements to gain the quality certification of the Wissenschaftsrat. Another argument is the top position of some private universities and business schools in different university rankings. In contrast, low drop-out rates at private universities are an argument for assessment center and interviews and not for the grade of A-level (Bildungsbericht, 2014). Further differences are in the organisation of studies: programmes are tightly organised and planned in detail at private universities. At state universities students have a greater flexibility for planning their studies and less mandatory attendance. Such a university system is preferred by individualists and encourages independent thinking. These are important criteria in the business world (Maaß, 2013).

Quality indexes, rankings and accreditations are recommendations by institutions such as the FIBAA or the German Scientific Council (Wissenschaftsrat). The state recognition is depending on the qualitative characteristics of a higher education institution and the rules about

keeping the state recognition for the degree programmes is determined by the Federal states. The Federal states have the sovereign right to set the rules for private universities in Germany. In the city state Berlin the founding rules to establish a private university are easier than in the city state Hamburg (Berlin.de, 2014). Currently, Berlin has 31 private higher education institutions. Around 15 private higher education institutions offer state recognised bachelor and master degree programmes in business related subjects.

2.1.3 Analysis of Positive and Negative Aspects of Private Universities in Germany

Positive aspects of private universities especially business schools are small classes and a good and personal mentoring programme of their students. Some students prefer a more familiar atmosphere and a school-like university study. Furthermore, most of the private universities, particularly the larger and well-known private universities, have very close links to companies and global corporations. Private universities which offer a dual study programme strongly advertise with their links to companies and high employability of their students. Further advantages of private universities are a good organisation, less bureaucracy and a low retention rate. Other positive aspects are the modern facilities and mentoring programmes. Disadvantages of private universities are high tuition fees. Because of this, the majority of students at private universities are from families with a wealthy background. Critics have pointed out that students are not used to and do not learn to act entrepreneurially at private universities (Maaß, 2013, Sauer, 2013). Most of the private universities teach their students school-like and the students are not developing intellectual and cognitive skills than students at state universities.

The question arises, whether the state universities develop their students so much better? Overcrowded lecture halls, less tutorials and just a few compulsory work placements at state universities also do not support students to learn how to act entrepreneurially. Furthermore, state universities are known for fewer links to companies than private universities. Especially private universities such as the HSBA Hamburg, BSP Berlin, bbw University, HWTK, DHBW and a few more optimize the dual study programme. That programme allows students to gain intensive work experiences combined with a university degree programme. Currently, 64.358 students study at a private university which offers a dual study programme. In general 135.806 students are studying at private universities in Germany. Compared to the number of 2.698 425 million students in 2014/15, the dual study programmes are in the minority. Fur-

thermore, the trend still continues that each year state universities have a higher number of applications and enrollments than private universities. The figures show that currently 2. 698.425 million students study at state universities in Germany. The Federal Statistical Office of Germany pointed out that in the years before there have never been so many applications and enrollments to state universities than in the winterterm 2014/15. Reasons are especially the dual Abitur (A-levels) cohorts which double the numbers of applicants.

Also the student numbers at private universities have increased steadily. In 2012, just 34.902 students started their degree programme at a private university. By contrast, 137.806 students enrolled at private universities in the winter term 2014/15 (Destatis, 2014). Because of that, a similar development can also be seen in the private university sector. Student numbers are rising but the trend is still to study at state universities in Germany. The greatest increase at private institutions can be observed at universities of applied sciences which offer law, business/economics and humanities and the social sciences degrees (Destatis, 2014). Also, the dual study programmes are steadily rising at private universities. However, just 4% of the student enrollments fall onto private universities which offer dual study degrees (Bildungsbericht, 2014). A strong advantage of private universities is the low loss of students (8-9 %) in contrary to 22-23 % at state universities (Maaß, 2013). Since 2000 the number of students at private institutions has raised six fold (Spiegel Online, 2014). Furthermore, private universities often offer attractive university degrees, a good learning environment, better mentoring and a close link to companies (Spiegel Online, 2014). Another reason for the growth of private universities is the high drop-out rate at state universities.

For example, the state government of Lower-Saxony expects that 10.000 out of 36.000 students will leave the university before completing their Bachelor degree. The drop-out rates may even increase as the German government aims to extend the number of students over the next years (Lower Saxonian Ministry for Science and Culture Chapter, 2014) Third, private universities have often lower entrance barriers and accept, for example, students with lower formal qualifications. Fourth, private universities introduced innovative and more practice-orientated programmes such as dual study programmes with firms (see chapter 1.1). Finally, state universities had introduced tuition fees which led to student dissatisfaction-so much so, that they were forced to eliminate the tuition fees. This had negative image effect. One advantage of private universities is the high standard of academic mentoring that students receive. Thus is, however, partially nullified by the high turn-over rate of staff at such universi-

ties (Bildungsbericht, 2014). If lecturers just teach on seasonal basis, a close mentoring of students is not practicable.

Another problem for private universities is the perception that they are at a disadvantage when dealing with the government particularly in terms of financing. Most of the private universities are relying on lecturers on a free-lance basis. They get no money for the preparation of the lessons and for marking student exams. The financial support of the government depends on the federal states. They have the sovereign power to support higher education institutions (Stifterverband, 2010). Critics pointed out that firstly private universities have to raise their service quality standards and should perform such as state universities if they require financial support of the federal government. Private universities have to secure high quality standards which include teaching, lecturers, professors, application process of the students, research etc. (Stifterverband, 2010).

State universities rely heavily on public support and without the basic financing of the government, they have to find different approaches to raise money for research projects or financing their research staff. More and more state universities have to collaborate with companies or patrons to secure their survival as higher education institution (Spiegel Online, 2014).

An interesting aspect in this context was the temporary introduction of tuition fees at German state universities. Several researchers suggested that the introduction of tuition fees would improve the service quality of higher education institutions and force them to act more as a service provider (Williams and Cappuccini-Ansfield, 2007; Gruber et al., 2010). In 2013, North Rhine-Westphalia abolished tuition fees, and later all other German states followed. Critics argued that tuition fees advantage students with rich parents who have consequently better chances to receive a good education. Thus social inequality played a significant role for abolishing tuition fees at state universities in Germany (Osel, 2012). Supporters of tuition fees emphasised the improvement of tutorials and service activities as an advantage for current students. They argued that teaching quality improved and the satisfaction of students with their institution increased (Brinck, 2013).

2.2 Service Marketing as a Key Challenge for German Private Universities

German Federal State governments are reducing their financial support for private and state universities. Therefore, the question arises whether future students should be considered more as customers or consumer-orientated with individual requirements of the university, the quality of teaching, and the work-life-balance in their years as a student (Reckenfelderbäumer and Kim, 2006).

A customer orientation is designed to establish a long-term and economically beneficial relationship to customers (Bruhn, 1999:10). However, the definition of customer is used in terms of for-profit organisations (Homburg and Stock, 2000:10). On the contrary, private universities in Germany are defined as not-for profit organisations and not-for profit organisations are characterised by non-commercial relations with their consumers (Sperlich and Spraul, 2007). Therefore, it can be denied to define university students as customers. Considering that, students can be more characterised as people with a high consumer-orientation. Researchers such as Delucchi and Korgen (2002: 100) have pointed out the emerging consumer-orientation of students; increasingly, they pay for their study programme and expect a good grade in return. Other researchers support this point of view and argued that higher education in general is dealing with a pure service which aims to satisfy needs and wants (Oldfield and Baron, 2000; Hennig-Thurau et al., 2001). That phenomenon shows that the students' expectations towards universities may conflict with the goals of effective pedagogy. The problem often occurs that students assume that they will be served only in ways they find pleasing (Long and Lake, 1996: 111). The risk is that students will not put effort into their studies and will not accept criticism. They expect to be entertained and receive their grades in return for paying tuition fees and attending lectures (Gose, 1997; Trout 2000). Thus, knowledge of expectations in the form of students' feedback supports a better delivery of service quality and student satisfaction in higher education (Leckey and Neill, 2001).

Critics emphasised the fact that students are not only consumer-orientated (Sperlich and Spraul, 2007). Students invest in themselves, i.e. by studying, doing company internships or participating in university activities. Students are not just consuming, they are also participating actively in university life. Therefore, it is important to have a differentiated perception of students in terms of consumer-orientation at universities (Geissler, 1993; Sperlich and Spraul, 2007). Authors such as Sperlich and Spraul (2007:12) determined the students' university relation as an active partnership. This is another approach to characterise and conceptualise the

role of students. However, an active partnership concept means interaction between the university and students and this requires a less consumption-orientated student's behavior and on the other side a supporting and helpful university staff attitude (Sperlich and Spraul, 2007:12). For example, an active partnership between private universities and students will be characterised by demonstrating the advantages and the disadvantages of the study programme. Therefore, it is important to integrate in an active partnership the parents of the students. Private universities require tuition fees in Germany. Students often cannot afford the tuition fees and parents take over. It is important that private universities demonstrate and clearly communicate to students and parents their return on investment.

To highlight an active partnership of students and their private university denies a purely economic and commercial student perspective and improve the university image. As a result, private universities have to emphasise students and parents the active partnership in form of i.e. arranging internships, small study groups, interactive lectures and university staff which acts as mentors. Based on this approach, private universities have to clearly state that students have to take actively part in lectures, university life and mentoring programmes. In addition, students have to cope with critique. Private universities like the Leipzig Graduate School of Management mentioned explicitly the active partnership between students and university. Students are obliged to act in such a way that the prestige of the university is preserved and enhanced (Handelshochschule Leipzig, 1997: 6).

Furthermore, the concept of an active partnership will support the increase in companies for student internships or study programmes such as the dual study programme. Most of the companies which support the dual study approach pay the tuition fees and sometimes support the institution financially (DHBW, 2014). Most private universities rely on tuition fees and therefore critics pointed out that this makes them vulnerable to the influence of companies (Riße, 2013). However, to manage a partnership actively will have an impact on students, parents, companies as well as the university.

Building personal long-term bonds with students helps to strengthen the reputation of the institution as well as the recruitment of students (Meffert and Müller-Böling, 2007). Word of mouth communication encourages former and current students to communicate about their institution (Soutar and Turner, 2002; Ulrich and Voss, 2010); to send newsletters to alumni on a regular basis, being invited to attend formal functions, participate in sporting events, and serve on committees sharpens the institution as a brand. This integrates students and alumni

and makes them feel part of an extended family. It therefore increases the likelihood that they will make future contributions to the university as they start to see the institutional community as an extension of their own lives (Meffert and Müller-Böling, 2007; Ulrich and Voss, 2010). In view of this, it seems plausible that private universities in Germany would benefit from systematic relationship marketing. Relationship marketing can act as a facilitator for building long-term commitments to students, grant-funders and communities (Meffert and Müller-Böling, 2007). It is a strategy designed to foster customer loyalty, interaction and long-term engagement. Relationship marketing is designed to develop strong connections with customers by providing them with information directly suited to their needs and interests and by promoting open communication. Relationship marketing contrasts with transactional marketing, which focuses mainly on increasing the number of individual sales (Hunt and Arnett, 2003; Ulrich and Voss, 2010).

Most organisations combine elements of both relationship and transaction marketing strategies. At a tactical level, relationship marketing can be used as a sales tool. Most student recruiters operate at the tactical level: via increased word-of-mouth activity, repeated business and a willingness of customers to provide information to the organisation (Kotler and Keller, 2009). Because of that, it could be assumed that future students choose their higher education institution by recommendations from friends, parents or siblings. Elliot and Healy (2001) mentioned in their research paper that the recommendation process of students to friends and relatives depends heavily on the service quality of the university employees and the friendly interaction between students and university staff (Ulrich and Voss, 2010). Elliot (2003) found out that female students have a greater desire of interaction with university employees and staff than male students. For higher education institutions that could implicate to take especially care of female students. Female students can be strongly influenced either positively or negatively by the behaviour of the university staff.

HEIs have recognised that a strong recommendation of their institution to friends or relatives is closely linked to the interaction between the staff and the student. Furthermore, they understand that satisfied students and graduates are much better marketing channels instead of attracting new students through expensive marketing programmes for their institution (Elliot and Healy, 2001; Ulrich and Voss, 2010). In a comprehensive report of the enrollment of German students, 88 % of future students point out that they speak with friends and relatives about possible study programmes and the choice of institution. Conversations with their

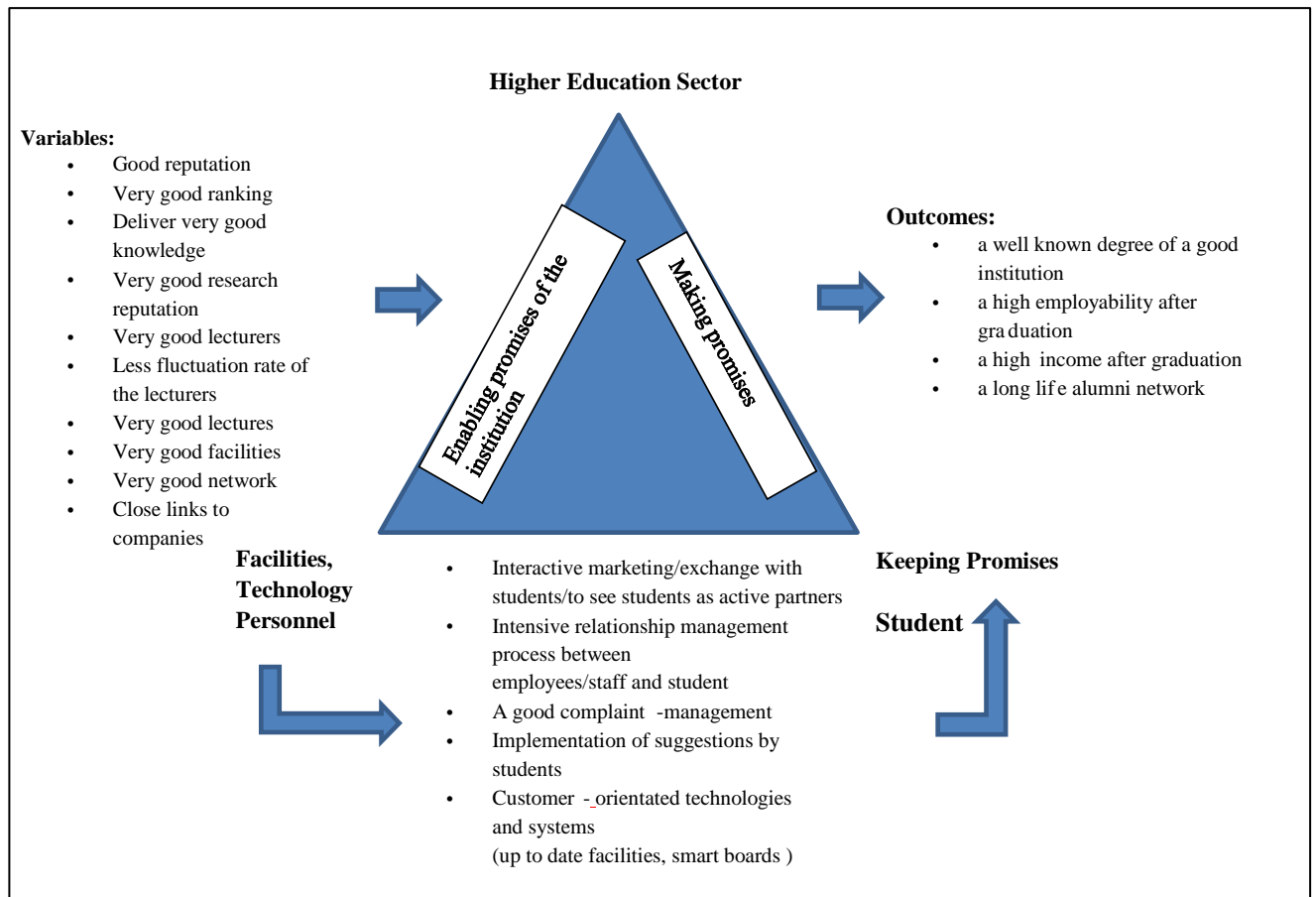
friends, parents and relatives who may have experiences with the institution or the study programme are the preferred approaches to gather information (Heine et al., 2005). However, while the interviewed pupils in the report mentioned that the advice of friends and relatives is important, only 12 % said that their friends or relatives influenced their decision about the choice of study or institution. It is important to emphasise that friends or relatives have an influence in the decision-making process, but the actual reasons for choosing the study programme and the institution are often not closely linked to them (Heine et al., 2005). Thus, there are obviously other factors that are more important for future students when choosing their institution.

Next to relationship marketing, the process of market research and screening is highly important (Hemsley-Brown and Oplatka, 2006; Frølich and Stensaker, 2010). In this context, higher education institutions have to ask themselves several questions such as: What is the number of competitors in my state, country and in the entire European higher education market? What is the share of each competitor? What is the target group? Has the educational institution a differentiation strategy? What is the niche of the institution? These questions can support relationship marketing and help to influence the decision-making process of students and the position of the university in a competitive higher education market (Bonnema and van der Waltd, 2008; Brown, and Oplatka,, 2006). Market research analyses the needs and wants of future students, their requirements of the current education system, and their activities next to university. This will help student recruiters and the strategic development of higher education institutions to gain a competitive advantage (Moller, 2006; Ross et al., 2007). However, firstly it is important to define the role of students. To increase marketing activities, Hemsley-Brown and Oplatka (2006) refer to a study of Conway et al. (1994) who mentioned in early years that it is a fundamental decision of any higher education institution if it regards the student as a customer or as a product. It is important to point out that the degrees at a higher education institution are not just a product and the students are not just customers. HEIs are a service, and services have to be marked differently than products (Hemsley-Brown and Oplatka, 2006; Galiffa and Batalle, 2010; Sultan and Wong, 2010). It is important in the higher education sector to concentrate on the nature of services and the key characteristics of service marketing in particular.

One key aspect in this context is the intensive relationship management with current and future students. Service marketing is based on people and is defined as the process of analysis,

planning, implementation and control of all activities of a service company which concentrates intensively on customer relationship management and customer benefits (Hemsley-Brown and Oplatka, 2006; Galiffa and Batalle, 2010). In general, the service marketing process is characterised by enabling processes by the service provider, making promises to customers and keeping promises (Grönroos and Ojasalo, 2007).

Figure 1. Aspects of service marketing in higher education



(Source: adapted from Grönroos and Ojasalo, 2007, 67)

Figure 1 shows the service marketing triangle of Grönroos and Ojasalo (2007) that has been adapted to the higher education sector. On the left side, important variables which may influence the decision-process of students in their choice of a higher education institution are listed. They represent a summary of previous studies that analysed academic and non-academic determinants of university selection such as the reputation of the institution, research reputation, delivering good knowledge, level of lecturers, facilities, networks and links to companies. Those variables influence the enabling process of the institution to attract students by pointing out their unique position regarding the mentioned variables. Students expect

a high standard of service which includes all the above mentioned variables. Because of that, higher education institutions are making promises to their students about service delivery, service quality and in the end the service productivity (outcome).

Expected outcomes are, for example, a university degree, knowledge and as final result, employability after graduation. Furthermore, the alumni network is another positive outcome for graduates. To broaden their network and to stay in contact with other graduates of the institution helps them to increase their employability and to extend their business contacts. However, it is important not to disappoint and frustrate students between the input process (enabling promises of the students) and the process of making promises to them (outcome process). To prevent possible misunderstandings, mistakes or the risk of violating promises, close links with students are important. Interactive marketing and the ongoing exchange with students by university staff will help to strengthen the relationship marketing process. Good management and customer-orientated technology would further support the interaction between students and the institution.

Successful students of today are the qualified employees of tomorrow. Germany has a lack of qualified employees and needs highly qualified graduates in subjects such as maths, informatics, physics and engineering (called MINT subjects). To increase their number, the state of Lower Saxony invested more than 120 million Euros in the improvement of quality of teaching and research of their state universities. The state universities of Lower Saxony agreed in a university contract to develop new research and teaching methods in order to keep students at their institutions. One reform was the improvement of tutorials and distance learning programmes. To offer students competent tutorials and distance learning programmes helps to motivate them (Fertmann, 2014). Researchers found out that 19% of the students are not able to finance their studies at state universities in Germany, i.e. to raise their living costs, accommodation and semester fee. In addition, 18 % said that they had wrong expectations about their studies and became unmotivated. The difference between expectations and experiences is one of the main factors for leaving state university (Kowitz, 2011).

Private universities recognised this problem and started to advertise their competitive advantage, such as small classes, good facilities and intensive mentoring programmes. Moreover, the loss of students at private universities is only 7 % compared to 20 % at state universities (Riße, 2013). Critics point out that just a small number of individuals have the chance to study at private universities in Germany. The tuition fees are very high and can amount up to

30.000 € for a Bachelor degree programme. On the contrary, supporters of private universities argue that the tuition fees are an investment in the future. Furthermore, they underline that various financial programmes exist which enable less well-off students to study at private institutions. There is a widespread prejudice that private universities are institutions for rich people only and mainly accept students from wealthy families. Proponents of private universities point out that their target groups are not only students from wealthy families, but those who are not satisfied with the conditions at state universities, such as crowded lectures, impolite and non-caring professors and staff members, and a high work-load. Many private universities try to better meet the expectations of students and, for example, to offer an academic education combined with practical orientation. Furthermore, the intensive mentoring of students is regarded as a main advantage. As a consequence, more than 90 % of the students at private universities finish their degree programme (Maaß, 2013).

However, many private universities have a good academic level and better mentoring programmes. Some private universities also offer their students to pay tuition fees after some years of working and justify tuition fees with better job opportunities for their graduates (Maaß, 2013). This applies particularly to students of dual study programmes (see chapter 1.1).

Private universities with a negative image and a low education level will lose partner companies and sponsors. This would gradually lead to a decline of student numbers and finally to insolvency. Therefore, they have a strong interest in being regarded as institutions with a high academic level and satisfied students. In this context, Roberts and Styron (2011) emphasised that the interaction between students and staff members of the university is particularly important. The commitment of the staff and intensive mentoring programmes give students a feeling of uniqueness. Academic advising plays a significant role, too; to advise students within their process of study and regarding their career goals will support them to achieve their personal and academic objectives. It is important that academic support staff and students work closely together (Roberts and Styron, 2011).

Large state universities in Germany are often not able to provide that kind of service to students. Crowded lectures, a large number of students and a lower service intensity of professors reduce their service quality. In contrast, private universities try to close that gap and advertise with small classes, intensive mentoring and friendly lecturers. Poor academic advice is

one of the most significant reasons to leave university (Pascarella and Terenzini, 2005; Schmidt, 2015). In addition, student support services are important for example, supporting students to find internships and facilitating the application processes can tighten the relations between the university and its students. Other examples are the support activities of the international office, i.e. to offer students attractive exchange programmes at partner universities, give recommendations and help finding affordable accommodation (Roberts and Styron, 2011).

The continuous exchange with students helps both sides to build a relationship which then reduces the students' uncertainty about their study process and makes them belong to the university (Roberts and Styron, 2011). Social connectedness is a key antecedent of student satisfaction. To be integrated and connected with other students and to establish life-long friendships are other important determinants as universities are not just for studying and learning. Students want to have a good time, to interact with their fellow students and to develop as social beings (Roberts and Styron, 2011).

However, students face various challenges such as unfamiliar surroundings and the different people at the university. The adaptation process in the form of social integration, surroundings, workload and the interaction with different groups of people are the most challenging aspects for new students (Bean, 2005: 227). To deal with these challenges and to achieve common goals with fellow students provides them with a feeling of security which is important (Kühne, 2014). Students who are not able to establish a social network at university will often be depressed and have low self-confidence, resulting in loneliness and marginalisation: to be involved in activities, learning groups or other university programmes can avoid this (Roberts and Styron, 2011).

Another important aspect is the approachability of faculty members. It is important that lecturers are available and accessible for students inside and outside the classroom. Professors and lecturers who help with assignments, coursework or give advice increase the students' satisfaction. To be involved and to care about students help to keep them at the institution (Pascarella and Terenzini, 2005; Sultan and Wong, 2010; Kühne, 2014). In this context, a meaningful learning experience and the collective efforts of faculty and staff members are particularly relevant (Roberts and Styron, 2011: 5). This may involve modern facilities, good access to resources, mentoring programmes, small classes (enriched learning environment) or learning support programmes i.e. moodle etc..

Given the high drop-out rates, state universities often try to promote and recruit new students to balance the loss of students of higher semesters. This strategy includes a strong interaction and communication between students and university. It is less costly to satisfy the needs of current students and to build a close relationship with them than to attract new students by expensive recruiting activities. Strong connections with students strengthen the relationship and increase trust and commitment (Adidam et al., 2004; Müller and Schneider, 2013). Adidam et al. (2004) refer to Morgan and Hunt (1994: 23) who define relationship commitment as “an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it”.

Other researchers regard relationship commitment of increased efforts to strengthen a relationship (Moormann et al., 1992). Adidam et al. (2004) pointed out that commitment has a close link to relationship benefits and therefore to service quality. They proposed that business students continue with their studies if the institution has implemented measures which strengthen the relationship between both partners (student and institution). These may include the location, tuition fees, close link to companies (internships), employability after graduation as well as the teaching quality and knowledge delivered by lecturers and professors (Carter and Yeo, 2009).

Roberts and Styron (2011) dealt intensively with possible strategies to keep students at universities. He found out about aspects to improve the student satisfaction rate and decreases the drop-out rates at higher education institutions.

Table 4. Factors to keep students at higher education institutions

Policy	Comments
Academic Advice	Advising students within their study process and career goals (faculty member and staff member) Problem: One of the key reasons for leaving university. Possible solution: Increasing service quality
Student Support Service	Improvement of career center, international office and a declined bureaucracy
Social Contacts/Bondings	Students have to feel part of their institution. They have to establish social bonds and lifelong friendships. That helps to give security in stressful times at the university. Problem: huge adaptation process for some students (surrounding, different groups of people, workload, pressure). Solution: being involved in learning groups, activities
Approachability of Faculty Members	Faculty members have to give support by assignments, course-work, and career advice. To have an open door for students. Frequent contact hours where students can ask questions etc. How is the collective effort of faculty and staff members in general?
Meaningful Learning Experience	Factors can be good facilities, good access to resources, mentoring programmes, small classes (enriched learning environment) or learning support programmes (moodle etc.).
Bureaucratic Factor	A declined bureaucratic factor. Good student service and high service quality/tuition fees for good and non-bureaucratic service!

(Source: adapted from Roberts and Styron, 2011)

Table 4 points out that six factors encourage students to continue with their studies and academic advice or mentoring of students is one of the key aspects. Academics as well as support members (i.e. Careers Center) should be available for their students on a regular basis. Assistance by assignments or by a Bachelor- or Master thesis are relevant mentoring programmes. Furthermore, office-time for students is another important aspect. To offer office times or meetings for students will help to build trust between students and staff and can possibly reduce high drop-out rates. Student support services are beneficial to the university students, because a career center which actively stays in contact with the students helps to increase the employability of their graduates. Therefore, high employability rates are one of the most important selection criteria for students (Carter and Yeo, 2009). Other aspects are social bonds and networks within the university. Students have to feel welcome and they have to make friends with other students. Because of that, students Unions, college sport or other university clubs play a significant role for students.

Academics and support members have to be accessible for their students. Examples are frequent office-hours and the quick reply of student emails. Selection criteria such as good university facilities, mentoring programmes, small classes (enriched learning environment) or learning support programmes (moodle etc.) give students a meaningful learning experience. Positive learning experiences are important because of less students' drop-outs and a positive image in form of word-of-mouth activities by students.

However, one of the most relevant aspects to reduce drop-outs is trust. Trust is defined as confidence (reliability and integrity) in an exchange partner (Morgan and Hunt, 1994: 23). Other variables which are closely linked to trust are similar values of the partners and an intensive exchange of information. However, what does it mean to communicate intensively with students and what are students' expectations of communication? Higher education institutions could consider providing students with course-related information in addition to information about extra-curriculum or social activities. Academics can, for example, communicate what students can expect from the course and what the content of the exam will be, which should increase the reliability of the institution which in turn should lead to enhanced trust amongst students (Adidam et al., 2004; Ulrich and Voss, 2010; Müller and Schneider, 2013). Other marketing practices include radio, television and print advertising as well as sport and cultural sponsorship. Moreover, semi-direct and direct marketing activities may contain in-school presentations, career evenings at schools, career exhibitions, open days, recruitment via institution alumni and database direct marketing (Tapp et al., 2004, Briggs, 2006)

Finally, a remarkable difference between state and private universities in Germany is the employment conditions of academics. At state universities they are regularly tenured civil servants and their salary is fixed by the government and may include performance incentives for excellence in research and teaching. At private universities, by contrast, professors and lecturers are paid by the higher education institutions where salaries and status dramatically differ from state universities (Schaschek, 2014). In general, the salary level is significantly lower and job security is not guaranteed. As a consequence, qualified professors typically prefer to work at state universities. Private institutes of higher education therefore will either employ professors with lower reputation or they are faced with high turnover rates (Schaschek, 2014). This may have a negative effect on their academic quality and continuity. Private universities often try to overcome these disadvantages by more flexible career paths and allowing their

professors to engage in consulting activities outside their regular duties at the school. Whilst private universities frequently advertise this as increased practice-orientation, it does also bear the risk that professors focus too much on their extra-university activities and disregard their teaching duties. Moreover, there are often no incentives for extensive research activities which further affect the reputation of private institutions negatively.

2.3 Conclusion

Chapter 2 showed that the number of students at state and private universities have continuously increased over the last 20 years. The year 2013 showed the highest increase of students at private universities in Germany; 157.899 students started their studies at a private university.

Furthermore, this chapter outlined the barriers of quality standards for private universities in Germany. The German Council of Science and Humanities is the leading science and quality policy institution in Germany. A certification and recommendation by the Council of Science and Humanities demonstrates a comparable quality standard to state universities and is therefore a very important reference for private universities. In addition, further quality standards such as rankings and accreditations are quality indicies.

Private universities are often characterised by small classes, personal mentoring and a familiar atmosphere. Critics pointed out that private university students compared to state university students do not learn to act as entrepreneurs. Private universities are often more school-like and students do not need to organise themselves in such a way as at state universities. On the contrary, private universities often have better links to companies and therefore better options to provide their students with jobs.

The importance of a good service marketing and relationship management was pointed out in chapter 2.2. Since students pay tuition, have their wants and needs, a customer orientated approach seems plausible. However, at the same time private universities are not-for profit organisations and students are not just consumers. Instead, they have to be seen more as active partners. They give feedback about service quality in form of teaching, mentoring etc. Thus, regarding students' as active partners describes better the long-term bond between student and university during and after their university career. Furthermore, private universities which offer a dual study programme must see students and their company employer also as active partners. To see prospective and current students as active partners in an ongoing relationship helps private universities to recruit and to keep students.

3. Theoretical Considerations: Service Selection Process, Service Quality and Service Marketing

Several empirical studies and methods have been conducted that explore the selection criteria of higher education institutions. In the following, these studies will be critically reviewed. At the end of this selection, the main findings of these studies will be summarised and implications for the own empirical study will be derived. The CHE regularly conducts surveys among and publishes rankings of German private and state universities. Furthermore, the institution is regarded as a high quality seal for higher education institutions.

As demonstrated in the previous chapter, the growing competition in the higher education sector in Germany increases the need private universities to develop adequate marketing strategies in order to recruit and keep qualified students. Like in other sectors, this is not possible without a good knowledge of their target groups. In particular, universities need to analyse the criteria that are relevant for prospective students when selecting a higher education institution. The contribution of the primary data helps private universities to address the wants and needs of their target groups. Private universities in Germany have to attract students to gain tuition fees. The difficulty of private universities is to point out their unique selling point to gain a competitive advantage. Therefore, it is interesting to explore the selection criteria of students at German private universities, and how they can be compared to selection criteria of state universities.

The selected primary data of students at private and state universities in Germany contributes to understand the decision process of students for an institution. What are the criteria and which are the most important for students to choose a private or state university? The last intensive evaluation about the selection criteria and rankings of German universities was done by Hachmeister and the Center for University Development (CHE) in 2007. They asked pupils in their final school year about their decision making criteria for a university (Hachmeister and Hennigs, 2007, 4). The evaluations pointed out relevant factors within the pupils' decision process. However, there is currently no evaluation of students' expectations and experiences about their selection and evaluation criteria or a management tool which help private universities in Germany to recruiting students for their institution. Nevertheless, more general aspects and variables have to be considered by analysing the students' decision processes

(Obermeit, 2012; Hesketh et al., 1999). Questions about the employability, fluctuation rate of academic and professional staff, and links to companies are missing.

Furthermore, there is an absence of research findings about the decision criteria of male and female students at private universities. But especially for private universities with a small marketing budget the selection criteria of female and male students are very important and essential for their growth. A management tool which uses selection criteria more in depth would allow private universities a more direct addressing of male and female students and in the end a higher recruitment rate. Another important contribution of the findings of this study will be the analysis of selection criteria by age and gender. To analyse the different age groups helps to specify recruitment methods and degree programmes. The CHE study (2007) pointed out that the most important criteria are the technical reasons, the reputation of professors and the institution, closeness to home, the attractiveness of the university location (City) and rankings.

The study did not show possible differences within the decision process of female and male students and how age groups focus on the selection criteria. But such differences between gender groups and age groups are important aspects in industries which concentrate on service quality and service marketing like the higher education sector (Todd et al., 1998). Service quality and service marketing are key factors in a global world and service strategies need to be sharpened for the higher education sector (Bruhn, 2008; Abdullah 2005). To find out about students' expectations and experiences is an important aspect for service quality issues in higher education. To identify critical service quality and service marketing factors from students' standpoint are aspects to identify students' selection criteria (Abdullah 2005). A service performance quality tool HEDPERF was developed by Abdullah (2005). This concept was specifically developed for the higher education sector.

The HEDPERF model consists of 41 items set up in a measurement instrument. It has been empirically tested for unidimensionality, reliability and validity of service quality in higher education. The HEDPERF model consists of 13 items of the SERVPERF model and 28 items derived from an intensive literature review about service quality items in higher education and linked service businesses (Abdullah, 2004). The model is characterised by academic and non-academic education aspects. The HEDPERF model was developed as a questionnaire which includes service quality performance questions that have to be answered by students.

The HEdPERF model has been tested by exploratory and confirmatory factor analysis and has valid and reliable measuring scale which can be transferred and used for evaluating service quality in higher education. Another positive fact of the HEdPERF model is the combination of academic and non-academic aspects. The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are techniques to understand the variance between measured variables. The exploratory factor analysis helps researchers to identify aspects which are based on the received data from i.e. questionnaires. Justification and explanation of the variance are the most important outcomes. By contrast, the confirmatory factor analysis is built on a hypotheses and tries to evaluate and analyse the hypotheses (O'Rourke and Hatcher, 2014; Backhaus et al., 2000). Such a method is driven by theory and would not be recommended for exploring important selection criteria of students about their choice of institution. The primary data of the thesis should help to develop and build a hypothesis about why students choose a private university in Germany as opposed to a state university.

However, critics point out that the HEdPERF model concentrates more on administrative aspects of the university sector and not on students' experiences and expectations. Therefore, perceiving students as customers and to ask for their wants and needs give a competitive advantage in a globalised higher education world. Maybe international students have different service quality requirements than domestic students?

Furthermore, the HEdPERF questionnaire was criticised for less validity of the items within the questionnaire. Sultan and Wong (2010: 265) mentioned that the items of the HEdPERF questionnaire, "are violating the principles of a good questionnaire". They pointed out that the factor analysis is characterised by many cross loadings and low loadings (Sultan and Wong 2010). Sultan and Wong (2010) recommended a more multivariate regression method in terms of evaluating students' expectations and experiences. Using correlation and regression analyses helps to compare the importance of criteria before and after the receipt of the service. One of the most important aspects of these analysis techniques is to highlight important criteria for customers. Models such as the HEdPERF model just query criteria without highlighting the important service criteria.

The consequence is that all criteria of the HedPERF model are important, and there is no clear picture of the more- or less-important service criteria (Brown and Mazzarol 2009). However, to gain a competitive advantage in higher education, universities have to focus on just a few

selection and service criteria of students. To narrow down the number of selection criteria helps to establish a unique selling position for the university. Primary data as received through the questionnaire, asks students about their priorities of selection before and after their decision process for a university, and allows the university to gain a deeper insight and supports the development of specific service marketing strategies. Using regression and correlation analysis can help to develop customized study programmes. Examples are flexible study programmes (blended learning), special degree programmes or study programmes combined with an intensive three year apprenticeship (dual study programme).

3.1 Study Selection Process: Theoretical Considerations and Empirical Analysis

3.1.1 The Study of Guggenberger (1991)

According to Guggenberger (1991), the choice of a degree programme is characterised by a multifactor and individual decision process.

Table 5. Variables which influence the decision process of students by Guggenberger (1991)

Individual	Institutional Dimension	Socialdemographic Factors	Variables with less influence on the students decision process	Outcomes
Geographical origins	Educational policies	Gender	Recommendation by friends	The student decision process is characterised by a short-term decision.
Interests	Quality management of higher education	Social origin	Advices against an institution	Often not a strategically and deliberately choice
Abilities	Cooperations and university links with companies	Regional origin		
		Student expectations and selections		

(Source: According to Hachmeister, 2007)

Guggenberger subdivided the individual decision process of students into an individual level and an institutional dimension. The individual level is characterised by aspects such as geo-

graphical origins, interests and abilities. Guggenberger underlined that aspects, such as recommendation by friends and advices against an institution, do not have a strong influence on the decision process of students. The social dimension considers rather educational policies, such as the quality management of higher education institutions or cooperations and university links with companies. Those aspects can influence the decision process on a long-term basis. Cooperations and high quality management are indicators of employability. Further, sociodemographics such as gender, social origin, and regional origin are important criteria and indicators for student marketers and recruiters. Furthermore, Guggenberger underlined the importance of the social dimension of the institution. Educational policies, quality management systems of the institution and university links to companies are important factors which students take into account in their decision process. Finally, the students' selection phase is strongly influenced by the location of the university and if the institution is near their parents home. In general Guggenberger argues that often students do not make their choice strategically and deliberately. Students have expectations and selections of a university and because of that their decision process is characterised by a short-term decision. To find out about German private university students selection criteria and the variables of their selection phase, can help universities to narrow down the gap between expectations and experiences. That helps also to keep students and to grow sustainable.

3.1.2 Bock (1991)

One of the first studies that analysed the selection phase of German students was conducted by Bock (1991). Bock argued that student disorientation is the greatest problem. Bock identified as the most important reason the lack of information, such as instruction about the study, possible career pathways or information by alumni.

Table 6. Reasons of disorientation in the students' decision process

Problems	Solution
Lack of study and university information	Better information material and illustrating possible career pathways
Types of students	Private and state universities

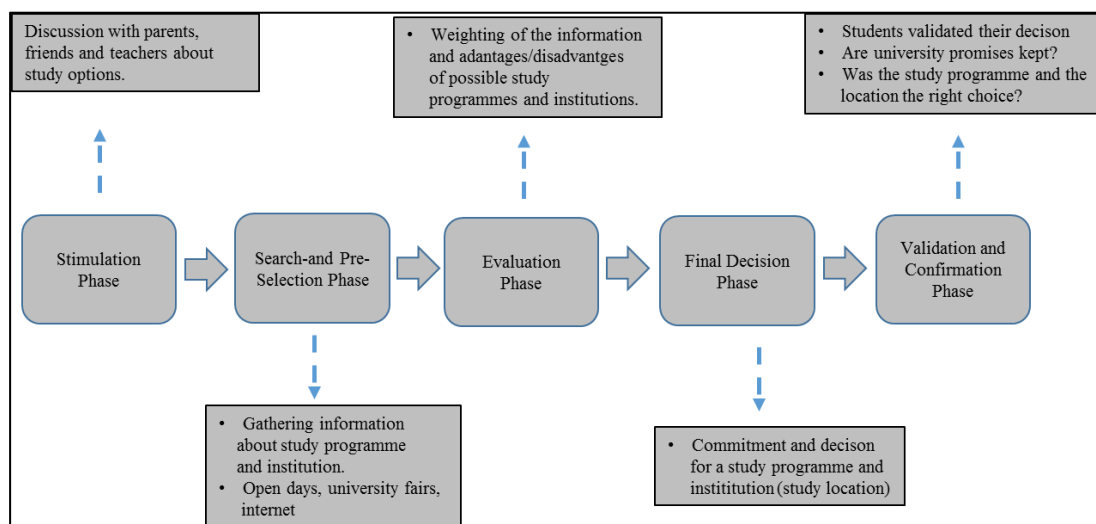
(Source: According to Hachmeister, 2007)

Bock therefore recommended that universities intensify their marketing activities and to provide more information material, such as magazines and brochures, information evenings with alumni and alumni profiles to highlight possible career pathways. Other relevant aspects are the development of personal identity, personal characteristics of future students and responsibility for future career pathways. According to Bock (1991), two types of students can be identified. The first type demands intensive mentoring, small classes and structured programmes, while the second type puts more emphasis on a high degree of freedom and personal choice. Bock recommends private universities to focus on the first type of students, while the second type may find state universities more attractive.

3.1.3 Tutt (1997)

Tutt (1997) analysed the reasons why students choose specific universities. He pointed out that the selection of a higher education institution can be subdivided into a five steps decision process (Figure 2).

Figure 2. The study decision process of Tutt (1997)



(Source: adapted from Tutt, 1997)

The first phase of the model contains the stimulation of the decision process for or against a course of study. This phase is characterised by discussions with parents, friends, teachers, etc. Closely linked to the stimulation phase for or against a course of study is the search - and pre-selection phase for a higher education institution. This phase comprises gathering information

about possible institutions by, for example, attending university fairs and open days and other activities which allow getting a first impression of the institution. The next stage is the evaluation of the gathered information and possible study programmes. The search- and pre-selection phase is closely linked with the evaluation of various institutions and study programmes. The final decision of a student for a higher education institution is made in the decision stage (fourth phase). This phase is characterised by a strong opinion and feeling of a student for or against a higher education institution. The last stage in that process is the validation and confirmation phase. In this phase students verify whether the promises of the institution are kept and implemented or whether there are differences between the students expectations and their current experiences.

Table 7. Selection criteria of higher education institutions (Tutt, 1997)

Rank	Criteria
1	Subject choice due the study programme (elective subjects/core areas)
2	Student capacity of the higher education institution
3	Student facilities, University facilities, accommodation aspects
4	Active student life/Students Union
5	Ranking of the institution

(Source: adapted from Tutt, 1997)

Table 7 summarises the main selection criteria according to their relevance. It reveals that the subject choice is the most important criterion, followed by the student capacity and the facilities of the institution. Rank 4 is the perceived student life and activities of student unions. Finally, the academic ranking of the institution ranks 5th.

3.1.4 Binsardi and Ekwulugo (2003)

The survey of Binsardi and Ekwulugo (2003) analysed the reasons why students apply for study programmes in the UK. The most important aspect is the perceived educational standard and international recognition of British universities. The second most important motive to study at a higher education institution in the UK is to simplify their immigration process. Other reasons are better employability after graduation, the cost of living, as well as safety and culture (Table 8).

Binsardi and Ekwulugo (2003) conclude that the service quality is an important factor of recruiting students at a higher education institution. Attractive institutional facilities, such as alumni networks and career services, are important during and after study. In fact, alumni services and the close relationship of the institution to their graduates are regarded as key competitive advantages (Binsardi and Ekwulugo, 2003). Media strategies and marketing activities to recruit qualified students should involve various marketing channels, such as websites, consulates, university fairs, newspapers and radio. In addition, it is necessary to consider the students selection about the choice of the institution. The two most important criteria for international students to study at an institution in the UK are product and price (Binsardi and Ekwulugo, 2003). However, for sustainable recruitment strategies it will be important to consider further aspects, such as the demographic characteristics of different target groups. In this context, gender plays an important role. For example, male students focus more on local universities and frequently use websites when making their choice. Additionally, female students consider alumni networks and experiences of friends with the institution as more important. Thus, adequate promotional channels would be alumni, relatives, friends, local universities and governments. To recruit international students, higher education institutions are recommended to use price and product as market penetration strategy in order to increase their market share (Binsardi and Ekwulugo, 2003).

Table 8. Selection criteria of higher education institutions in the UK in the study of Binsardi and Ekwulugo (2003)

Rank	Selection Criteria
1	Educational standard/recognised qualification worldwide
2	Ease of university admission and of immigration procedures
3	Ease of finding employment during and after the study
4	Costs of living, accommodation, safety and culture

(Source: according to Binsardi and Ekwulugo, 2003, 323)

Table 8 summarises the main selection criteria according to their relevance. It reveals that the educational standard of the institution is the most important criterion, followed by the ease of university admission and the aspect of employability after graduation. Finally, rank 4 considers the costs of living for students which implicate tuition fees, accommodation and safety.

3.1.5 Hachmeister et al. (2007)

The study by Hachmeister et. al. (2007) was published as a working paper of the “not-for-profit CHE Centre for Higher Education which was founded in 1994 on the initiative of Reinhard Mohn and Professor Dr. Hans-Uwe Erichsen, former president of the German Rectors Conference. Since then the CHE shareholders have been the Bertelsmann Foundation and the German Rectors Conference Foundation. The CHE takes decisions on issues and projects independently and autonomously. The Bertelsmann Foundation provides about half of the overall budget of around three million euros per annum. The CHE promotes a versatile scientific system that, amid changing conditions, offers optimal and differentiated development opportunities to anyone who wants to participate in it and benefit from it. For their part, higher education and research institutions should use and shape their autonomy, develop and implement diverse profiles, and assume their societal responsibility” (CHE, 2014). Hachmeister et al. (2007) analysed the responses of 3.600 pupils about their university decision process in their final school year.

The authors asked them to rate the relevance of different criteria on a scale ranging from 1=“very important” to 4=“not important”. One of the most interesting findings is that 82 % of German pupils choose a Bachelor degree because they expect to go on with a Master degree and were convinced that without a Master degree there will be less chance to get employed. Furthermore, 77% of the responding students choose a degree programme because of international and intercultural aspects. To be in a programme with a high percentage of international elements, such as languages, cross-cultural aspects or international management topics, is the second most important selection criterion. The third important variable in the decision-making process for a Bachelor programme is the perceived employability after graduation. 51 % of the responding students made their decision based on perceived future job opportunities. Therefore, it could be assumed that universities which offer dual study programmes or have close links to companies, have a competitive advantage and could strengthen their market position. Other variables for the choice of a Bachelor programme are the credit point system and their modularization which allows choosing core areas and elective courses. The study highlights that 74 % of the 3.600 respondents made their study and subject choice during their school time. Most pupils made their decision about studying in the sixth form. On the contrary, a high percentage of students (50 %) made their choice about the location of the higher

education institution after finishing their school time. A decisive moment to recruit students to institutes of higher education is therefore the final year at school.

In this context, a key question is which selection criteria help to convince interested students to study at a private university. At private universities students have to pay tuition fees and private universities have therefore problems to recruit students. Furthermore, it would be interesting to analyse whether female and male students consider different selection criteria as relevant for their decision process. With regard to the above mentioned choice questions, Hachmeister et al. (2007) also analysed those variables that play a significant role when making a decision for a specific higher education institution. They found out that the most important variables for choosing an institution are good facilities and infrastructure, followed by services for study beginners and current students, and thirdly the cost of tuition. Other important variables are university support (career service etc.), the reputation (image) of the institution, a wide variety versatile spectrum of courses, student unions and leisure time facilities, quality of opportunity, and the size of the higher education institution.

3.2 Conclusion

It is obvious that the selection of higher education institutions is a multidimensional process, based on factors at the individual level (i.e. gender), social level (i.e. recommendations of friends) and institutional level (i.e. reputation of the university). Moreover, many universities aimed to promote the name of the institution and to develop a strong brand image. This includes their education and research profile as well as the city in which they are located. Another important aspect is that alumni may recommend their institution to their employer or help to strengthen the company network with the institution, helping future students with internships or dual study programmes which combine study and work at a company. A competitive advantage of private universities would be the aspect of close links to companies where students can complete their dual studies (study and practical work) or long-term internships. Particularly at private universities students and parents often ask: What do I get for my tuition fees? Is it a good investment? Do I get a good job after graduation? By providing answers to these questions, private universities could attract more students for their Bachelor and Master programmes. Thus, close links to companies, a strong alumni network and a high employability are the most important arguments to justify high tuition fees. Another important variable for recruiting both domestic and international students is the price of a study programme. Tui-

tion fees at business schools are high and some students choose their institution because of low costs.

Table 9. Summary of the selection criteria of Guggenberger (1991), Bock (1991), Tutt (1997), Biswardi and Ekwulugo (2003) and Hachmeister (2007)

Selection Criteria (Ranked)	Guggenberger (1991)	Bock (1991)	Tutt (1991)	Binsardi and Ekwulugo (2003)	Hachmeister et al. (2007)
1	Geographical Origins	Lack of Study and University Information	Subject Choice	Educational Standard/Recognised Qualification Worldwide	Bachelor degree as Pre-Qualification for a Master
2	Students Interests	Types of Students	Student Capacity of the higher education institution	Ease of University Admission and of Immigration Procedures	International and Intercultural Aspects
3	Students Abilities		University Facilities	Ease of Finding Employment	Employability after Graduation
4	Educational Policies		Active Student Life	Costs of Living, Accommodation, safety and Culture	Study Choice during School Time
5	Cooperations and University Links		Ranking of the Institution		Recruit Students in Final School Year
6	Quality Management				Image of the Institution
7	Gender				Student Services
8	Social Origin				Amount of Tuition Fees
9	Regional Origin				Facilities and Infrastructure
10	Students expectations and perceptions				Variety of Degree Programmes
11	Recommendations by friends				
12	Advices against an Institution				

(Adapted from: Guggenberger (1991); Bock (1991); Tutt (1997); Biswardi and Ekwulugo (2003); Hachmeister et al. 2007)

Table 9 shows that different individual, social and institutional selection criteria determine the selection process of students. A wide range and topics had been mentioned in the above listed research papers. It will be difficult for a private university to consider and address all these factors in their recruitment and marketing strategy. Furthermore, as mentioned in chapter 1.1 are most of the private universities relying on tuition fees and have a tight budget to implement all the preferences, wants and needs of prospective students. Table 9 is a ranked list of selection criteria observed by different researchers in ascending years. The ranked list gives an overview about important selection criteria especially in the last years. However, the selection of a private university is a process where a lot of aspects are considered by prospective students. Therefore, it will be too easy just to use the above listed selection criteria and try to implement them into possible university recruiting and marketing strategies.

Furthermore, private universities have to find out in detail which selection criteria are relevant for their types of students and the specific demographic target groups. General recruitment and marketing strategies just based on already existing selection criteria can be misleading and in the end not successful. However, the above researched selection criteria have to be taken into consideration and can be used to adapt students' surveys etc. It is important that private universities find out by prospective and current students about the most relevant selection criteria and specific types of students for future recruiting and marketing strategies. Thus, private university marketers have to find out about their students' preferences, wants and needs. Most of the private universities try to recruit students by their unique selling points. But often there is a disconfirmation about the unique selling point from the point of view of students and private universities. Therefore, private universities have to find out about the most important selection criteria and address them in recruitment strategies. To determine types of students by different selection criteria as well as by demographic criteria support to indicate more in detail specific students target groups.

3.3 Service Quality at Higher Education Institutions

After discussing the relevance of selection criteria we now change focus on the universities and the services they provide. More precisely, how these can be improved to attract and keep qualified students.

Firstly, it is important to define quality and then to link it to services and productivity in the context of higher education. The competitive advantage of a company depends to a large de-

gree on the quality of its produced goods. In the service industry, such as in higher education institutions, quality can be the competitive edge (Grönroos und Ojasalo, 2007,). Traditionally, the term quality is related to the quality of goods. As a consequence, the definition of quality typically describes the physical characteristics and specifications of products and is mostly characterised by perceived customer value (Grönroos and Ojasalo, 2007). Other definitions of quality are based on the characteristics of products such as goodness, luxury or shininess (Crosby, 1986 b; Parasuraman et al., 1991). By contrast, service quality is defined as excellence of services and the difference between customer expectations and selections of delivered services (Parasuraman et al., 1991). More specifically, the quality of education could be defined as the “ability of students’ knowledge to satisfy stated requirements-those requirements set by the employers, accrediting bodies professional societies” (Karapetrovic and Willborn, 1997:287).

Grönroos and Ojasalo (2007) suggested that service quality as perceived by customers can be differentiated in two dimensions, a technical (outcome) dimension and a functional (process-related) dimension. The first dimension is characterised by the outcome of the service. The basis of this dimension is the technical output which customers receive after their interaction with the service provider. An advantage of the technical outcome dimension of a service is that the customer can easily evaluate the final result (Grönroos and Ojasalo, 2007). However, the perceived customer outcome is also influenced by further aspects, such as the delivery of the service or the effectiveness of the interaction between service provider and customer (Grönroos and Ojasalo, 2004; Berger et al.,1993). In the context of higher education, the technical outcome for students, such as the delivered knowledge, the degree or the provided internships or company interviews by the institution, can be important aspects of service quality. The technical outcome is often perceived more rational and emotionless by the students. In return, the functional service quality dimension can be characterised rather subjectively. That dimension is characterised by the way in which customers receive the end result. Outcomes of the functional dimension are more difficult to measure because customers perceive the final result (service/product) very subjectively (Grönroos and Ojasalo, 2007; Berger et al., 1993). Aspects such as the friendliness of the staff, the feelings of the students that they are studying at great institution, or attractive job offers after graduation, can positively influence the functional dimension of service in the higher education sector.

While quality can be a competitive edge in the higher education sector, the key question is how universities can improve service and thus gain a future competitive advantage. Trying to secure a technical advantage will be difficult because competitors offer similar services (Grönroos and Ojasalo, 2007). Furthermore, as explained in the previous chapter, the technical outcome may not be the most relevant criterion for current and future students to recommend or select a higher education institution. Research has highlighted that gaining a competitive advantage, especially in the service sector, is difficult, as many service-orientated firms have similar service solutions, service packages and service strategies (Grönroos and Ojasalo, 2004). In addition, higher education institutions offer similar degree programmes and make similar promises as to why students should choose their institution for a degree programme. Therefore, it is important to identify the right service quality and productivity criteria in order to gain competitive advantage. Higher education institutions in Germany take it for granted that they must deliver a good education in the form of knowledge and degree, i.e. a high technical outcome dimension is always assumed (Meffert and Müller Böling, 2007). Therefore, the functional dimension that implies how the institution communicates and interacts with students, improves employee skills by continuous training, and builds close links to companies is obviously more relevant when considering which factors lead students to study at a good institution. It may be assumed that this functional dimension becomes even more important than the technical quality in form of delivering good lecturers in the context of the increasing competition in the educational sector combined with high tuition fees and the uncertainty of choosing the right higher education institution (Hachmeister et al., 2007). A generic concept that may be used to measure service quality is the Balanced Scorecard (BSC). The BSC combines important service productivity dimensions with relevant key performance indicators to measure service productivity and service quality. It is a management tool which, in addition to financial variables, considers further strategic dimensions, such as customer perspective, internal process perspective as well as learning and development perspective (Kaplan and Norton, 1996). Thus, it could be used to assess service quality and performance models and controlling tools. In order to implement and use it in an effective way, however, it is important to identify the target markets and customer segments and the correct key performance indicators, targets and process methods. A reduced catalogue of indicators is recommended (Kaplan and Norton, 1996). Although the BSC can be a good starting point for developing a service marketing strategy, the recent changes in the higher education sector in Germany as described in chapter 2.1 require a deeper understanding and a comprehensive discussion about how service quality in HE can be improved. In consideration of an increasing

higher education market it will be necessary to evaluate measure and determine service quality. In this context, a model to conceptualise, measure and improve service quality may be SERVQUAL (Parasuraman et al., 1988). The foundation of the SERVQUAL scale is the gap model proposed by Parasuraman et al. (1985, 1988) who pointed out that a negative discrepancy between selections and expectations will lead to a performance gap which causes dissatisfaction. On the other hand, a positive discrepancy leads to consumer delight. The authors identified a set of 22 key items that they integrated into five dimensions of service quality. In total, the service quality measurement scale is comprised of 44 items (22 for expectations and 22 for selections) (Jain and Gupta, 2004).

Critics of SERVQUAL point out that this measurement model does not address all important issues of service quality. It is especially criticised by pointing out that the comparison of expectations and of experiences and the aspect that satisfaction and service quality are two different streams (Cronin et al., 2000; Cronin and Taylor, 1992, 1994; Eskildsen et al., 2004). Table 10 provides an overview of main articles that critically examined the SERVQUAL model.

Table 10. Articles criticizing the SERVQUAL Model

Authors	Title of the article	Journal	Revised Year
Williams, C.	SERVPERF versus SERVQUAL: reconciling performance-based and selections-minus-expectations measurement of service quality	Journal of Marketing Vol. 58, No. 1, pp. 125-131	1994
Buttle, F.	SERVQUAL: review, critique, re-research agenda	European Journal of Marketing, Vol. 30 No. 1, pp. 8-32.	1996
Seth, N., Deshmukh, SG., Vrat, P.	Service quality models: a review	International Journal of Quality & Reliability Management Vol. 22 No. 9, 2005 pp. 913-949	2005
Ladhari, R.	A review of twenty years of SERVQUAL research	International Journal of Quality and Service Sciences Vol. 1 No. 2, pp. 172-198	2009
Sultan, P and Wong, H.Y.	Service quality in a higher education context: antecedents and dimensions	International Journal of Quality and Service Sciences Vol. 2 No. 2, pp. 259-272	2010

A main critique is that the SERVQUAL model may be affected by low reliability and validity (Ladhari, 2009). For example, Ladhari (2009) and Babakus and Boller (1992), who dealt intensively with the GAP model, argue that the dominant dimension in the SERVQUAL model is selection while customers tend to rank expectations higher (Babakus and Boller, 1992; Ladhari, 2009). To avoid problems resulting from the variance between expectations and performance selection of the service customers receive, critics argued that to focus only on selection scores and to evaluate only the selection of the service (Buttle, 1995; Luk, 2002). A reason is that selection scores are superior to selection-minus-expectation scores in terms of reliability and convergent validity (Ladhari, 2009). Consequently, other models to measure service performance were recommended. Cronin and Taylor (1994) developed a simpler performance model which they called SERVPERF. SERVPERF measures service quality without relying on the disconfirmation paradigm of expectation and selection. It considers only the selections of the received service and consists of 22 selection items related to the service quality performance excluding any aspects of expectations dimensions.

Other researchers support the argument that services provided can be best measured and evaluated by performance aspects and key indicators which determine performance. The reason behind this argumentation is that performance-based measures are able to explain the service quality more reliably (Cronin and Taylor, 1994; Boulding et al., 1993). Service quality and the perceived service quality are key drivers for high service performance in service companies (Grönroos and Ojasalo, 2007). Both drivers consider various elements to improve quality in service companies, such as employee competences, employee motivation, organisational efficiency, technical devices availability, information and technology employment (Grönroos and Ojasalo, 2007). A conceptual service quality model which considers a trade-off between (service) productivity and perceived service quality variables could be a sustainable and holistic approach of developing a conceptual model for service quality and students recruitment in higher education.

However, it will be firstly central to identify key performance dimensions and indicators which are strongly linked to service quality and marketing in higher education. Especially, interesting in this context is the question how students as well as employees of higher education institutions react to modified processes and how the changes in the institutional environment (chapter 3.1) affect their priorities and preferences. A range of academic and non-academic criteria has been pointed out by Abdullah (2004).

Table 11. Academic criteria of service quality in the higher education sector

Academic Criteria
Responding to requests promptly
Trust
Politeness
Individualized attention
Knowing students needs
Keeping students interests at heart
Knowledge in course content
Showing positive attitude
Good communication
Sufficient and convenient consultation time
Excellent quality programmes
Variety of programmes/specializations
Flexible syllabus and structure
Reputable academic programmes
Educated and experienced academicians
Positive work attitude
Equal treatment and respect
Feedback to improve service performance

(Source: orientated on Abdullah, 2004)

Table 12. Non-academic criteria of service quality in the higher education sector

Non-Academic Criteria
Promises kept
Sympathetic and reassuring in solving problems
Dependability
On-time service provision
Responding to requests promptly
Trust
Feeling secured with the transaction
Politeness
Individualized attention
Knowing students needs
Keeping students interests at heart
Good communication
Flexible syllabus and structure
Reputable academic programmes
Efficient/prompt dealing with complaints
Positive work attitude
Knowledge of systems/procedures
Providing service within reasonable time
Equal treatment and respect

(Source: orientated on Abdullah, 2004)

Non-academic items of the scale (table 12) include variables such as administrative support, organising company internships, overseas study visits, information, communication, safeguarding, equal treatment, tolerance towards other religions, etc. Academic aspects contain teaching aspects, level of education of the lecturers, positive attitude and communication skills of the lecturers (Table 11).

Besides the focus on relevant indicators it will be important that indicators support flexible and adaptable service marketing. The vital customer exchange of the service provider can help to increase service marketing and service quality (Grönross and Ojasalo, 2007). Especially in the higher education sector the interaction between academic staff and professional services of the institution and students is crucial. A satisfying interaction can improve the reputation and image of the higher education institution, lead to a higher involvement and commitment of the students and finally allow a better fulfillment of their requirements, wants and needs (Voss, 2004).

Market research has shown that consumers are interested in communicating their experience of the received service and would like to become integrated in the transformation process in order to improve the services and products (Kotler et al., 1997). Therefore, it will be important for higher education institutions to set up a marketing and service quality management tool by integrating customer views and expectations such as staff/student committees (Bruhn and Strauss, 2001). Alumni networks may be one way to integrate former students and learn from their experiences. Accordingly, prospective service quality and student recruitment in higher education has to consider elements of an strategic management system where customers are integrated in the service process and can positively influence and enhance its quality (Voss, 2004). However, too many customer-orientated measurement indicators which allow the consumer to influence the service also have a negative impact on the service quality of an institution. Examples are delays (if customers deliver their input too late) or reduced quality due to the insufficient inputs. Therefore, the integration of customers in the transformation process can have a negative effect on the quality of the product or service. Consequences can be a decline in service quality and bad relations between customers and the service provider. Such a loss of customer confidence and damage to reputation can hinder a sustained development of a service organization (Lasshof, 2006; Bruhn, 2008).

One possible solution for the management of service quality is the combination of static (i.e., financial and technical indicators) and flexible key performance indicators which are able to

measure customer satisfaction and consequences of customer integration (Johnstone and Jones, 2004). This is reflected, for example, in Bitner`s (1990) model of service encounters which underlines the most significant variables of service quality. Variables to determine service quality in Bitner`s model are expectations, perceived service performance, disconfirmation and the relationship between consumer satisfaction and perceived service quality (Table 13).

Table 13. Aspects of service quality according to Bitner

Dimensions	Remarks
Expectations	How expectations get influenced by: <ul style="list-style-type: none"> - Word-of-mouth communication - Personal needs of the consumer - Past experience of the service - External communication by the service provider (Zeithaml, 1988; Zeithaml and Berry, 1996; Hill, 1995)
Perceived service performance	<ul style="list-style-type: none"> - Facilities and surroundings for receiving a service - Equipment which is involved in the service process - Perceived competence and credibility of the service provider - Responsiveness, reliability, courtesy of the service provider (Zeithaml, 1988; Zeithaml and Berry, 1996; Hill, 1995)
Disconfirmation	Gap of expectations and perceived service performance (Hill, 1995)
Relation between consumer satisfaction and perceived service quality	Point out that perceived service quality leads to consumer satisfaction (Cronin and Taylor, 1992) Point out that consumer satisfaction leads to perceived service quality (Parasuraman, 1988)

(Source: adapted from Bitner et al., 1990)

The identification of relevant indicators in higher education institutions is particularly difficult because the selection of service quality is often based on the personal view of the student. While some students find the service quality to be good, other may perceive it to be low, depending, for example, on their preferences or on their academic performance (Quinn et al., 2009). One approach to overcome this difficulty would be to measure key performance indicators with multiple measures. Moreover, the evaluation of the relevant criteria by students may be triangulated by evaluations of fellow students and professors, staff members, etc. Finally, it is important that universities focus on those indicators which are important for their particular target groups.

3.4 Service Marketing at Higher Education Institutions

3.4.1 External Marketing at Higher Education Institutions

The analysis of service selection criteria and the elaboration of a service quality concept are the basis for developing an adequate marketing strategy to attract and retain qualified students. Based on the general marketing literature, two dimensions can be distinguished, namely an internal and an external perspective (Gremmler et al., 1993; Hachmeister and Hennigs, 2007). While the external perspective of service marketing is directed towards the customers, the focus of the internal perspective is the employee. Since many employees have direct or indirect contact with customers, the two perspectives are not completely separated, but interlinked.

The basis for any marketing strategy is an adequate selection and segmentation of the relevant markets. While in the past, most higher education institutions in Germany highly diversified with a broad range of subjects and programmes, the current changes of the institutional conditions (chapter 2.1) lead to an increasing specialization. For example, some universities position themselves as research orientated and other highlight their close links to companies. Another criterion of market segmentation is the geographic orientation. While some institutions underline their international orientation and international body of student and lecturers, others focus on the respective region. Market segmentation does not only involve the sales market, but includes the procurement, capital and labour market as well. The latter is particularly relevant for higher education institutions, because their employees are the most important resource. Compared to many other service sectors, they also have a very high degree of autonomy. Therefore, the human resource strategy and particularly the strategy of hiring academic and professional staff are very important criteria when student make a decision for or against a higher education institution (Reckenfelderbäumer and Kim, 2006, Farr, 2003). The best possible market selection and segmentation is the basis for deciding about marketing-mix instruments. In the context of private universities, these can be divided into performance policy, compensation policy and contraction policy (Reckenfelderbäumer and Kim, 2006; Farr, 2003). Performance policy includes the product (range and depth of programmes), the distribution of the service or product (distribution channels), and the communication (advertisement, public relations). The compensation policy involves the conditions and performance-based fee for a service or product (Voss, 2009).

At private universities, students have to sign a contract about paying their tuition fees on a regular basis. Moreover, further obligations of the student and the university are often specified. At state universities where no tuition fees have to be paid, these obligations are subject of a psychological contract between the two. The programme policy involves a decision about whether the university concentrates on a wide spectrum of programmes (that may involve, i.e., technical, social and natural sciences) or if it concentrates on specific subjects (i.e., Business Schools, Law Schools). Next to the programme policy, a university has to decide on the variety of its programmes. While some universities offer more general degrees such as an MBA, others prefer specialized degrees such as a Master in Marketing or Human Resource Management. Decisions have to be made as well in the Bachelor programmes, for example, about whether the university should offer dual study, full-time or part-time degrees and whether the programmes should be subject-related or involve a wider spectrum. The communication policy of higher education institutions typically contains information about the main programmes, the teaching philosophy and the core administration process (i.e., application deadlines, formal requirements).

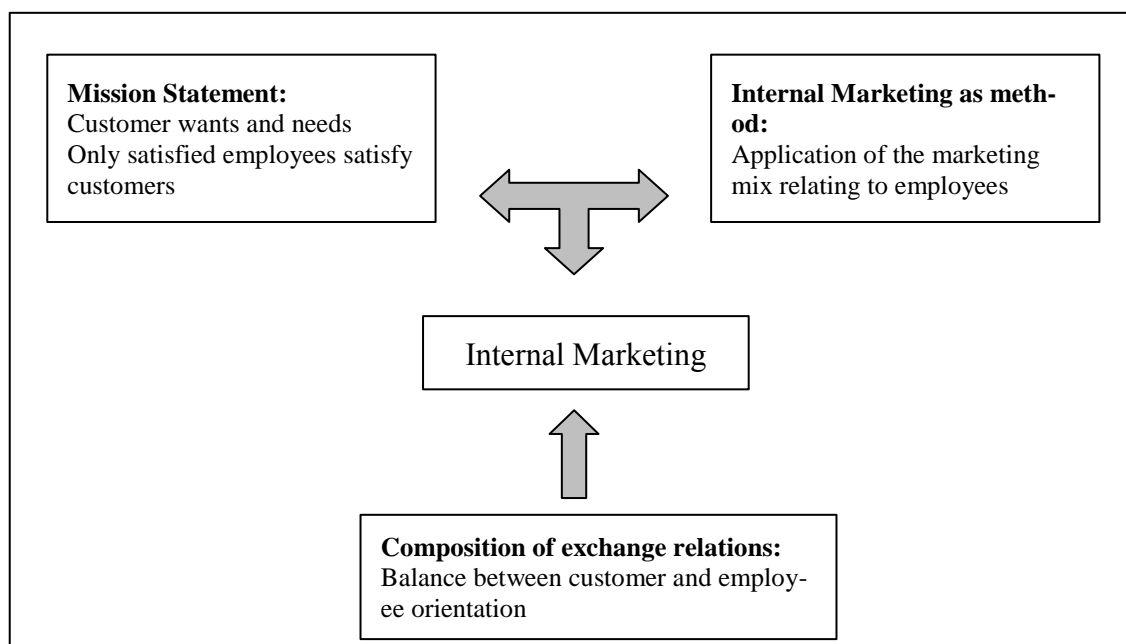
However, as pointed out in chapter 3.1, students often base their decision also on further criteria, such as the location or the university campus. Therefore, universities should also include information and pictures about their facilities (interior, library, classroom, design of the building, etc.) in their brochures and further information material. In the context of the distribution policy of higher education institutions, the academics, administration and the student support services (mentoring, alumni, social and sport activities) play an important role. The quality of teaching involves the lectures, educational material and the quality of the students (Voss, 2004). The quality of the lecturers can be rated by their previous employments as lecturer, their evaluations or references. Students can evaluate the quality of their lecturer by the quality of presentations or the transfer of knowledge and information. Teaching evaluations can be distributed to the professors and lecturers only as a part of the university overall communication strategy. Other aspects of the quality of teaching are tutorials or mentoring programmes. Some researchers point out that personal mentoring and quick responses to student questions are important indicators of teaching quality (Voss, 2009).

This applies particularly to private universities that often advertise student-orientated services as competitive advantage. To keep this promise is therefore particularly important for their academic staff, who are often employed only on a part-time basis and have no offices at the university facilities.

3.4.2 Internal Marketing at Higher Education Institutions

Internal marketing is defined as all activities that increase the satisfaction of employees with their employer and their customers. Internal marketing is a strategy to enhance the success of a company with the objective of establishing a common mindset in order to achieve company goals (Meffert and Bruhn, 2012). According to Meffert and Bruhn (2012), internal marketing consists of three relevant aspects (Figure 3). The mission statement is based on the assumption that only satisfied employees have good relations to customers and care about their wants and needs. Internal marketing as a method is characterised by using marketing-mix methods to recruit and retain qualified employees. Potential incentives in this context are a good workplace, working environment/atmosphere, an adequate salary and training opportunities (Meffert and Bruhn, 2012). However, it is important to find a balance between employee and customer orientation. Employee-orientated internal marketing is characterised by the company view (mission statement) to see the employees as system components that have to be formed and influenced by the company (Bruhn, 1999; Meffert and Bruhn, 2012).

Figure 3. Fundamentals of internal marketing



(Source: adapted from Meffert and Bruhn, 2012)

As can be observed in figure 3 the role of employees is a key aspect of internal marketing, as companies rely heavily on their employees as these people have direct customer contact. These employees are responsible for good service as well as establishing and keeping good

relations with customer. Examples for a good service are how employees satisfy customer needs and wants, how friendly, caring, accessible and flexible the employees are, and if appointments are met in time. Customer satisfaction is important across all departments and all hierarchical levels (Bruhn, 2001; Meffert and Bruhn, 2012). To ensure this, the management plays an important role. It has to communicate and exemplify the level of behaviour with or in front of customers. Moreover, it has to decide about service quality standards and monitor their implementations. Company goals should comprise internal and external marketing aspects. It is relevant to have satisfied employees and also satisfied customers. Thus, to maintain customer satisfaction, service-orientated companies rely on customer-orientated and motivated employees (Bruhn, 2001; Meffert and Bruhn, 2003).

Three aspects of internal marketing can be distinguished to enhance employee and customer satisfaction, namely the simultaneous promotion of customer and employee satisfaction, systematic planning and decision process, and the common mindset (way of thinking of employees) about the company (Meffert and Bruhn, 2012):

- **Simultaneous promotion of customers and employees**

Companies have to ensure that the two-way process (customer and service provider) is coordinated in the best possible way. Problems can be the inherent (personal characteristics) relations of customers and service providers (Meffert and Bruhn, 2012).

- **Systematic planning and decision process**

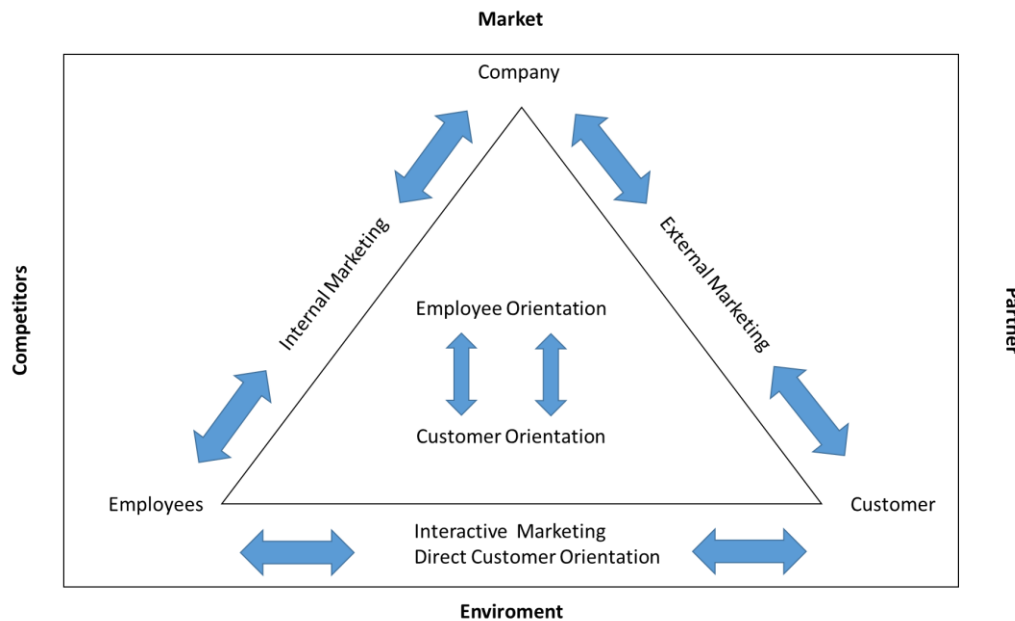
Internal marketing has to be planned, implemented and controlled as a management process. This requires the specification of company aims, strategies and instruments to put the management process into action (Meffert and Bruhn, 2012).

- **Common mindset (way of thinking of employees)**

Companies which concentrate on internal marketing often aim to implement marketing as a concept of company culture and not just as a supportive function. It is important for them to establish marketing as corporate philosophy (Meffert and Bruhn, 2012).

The importance of the three above mentioned aspects and their relations to each other is illustrated in Figure 4.

Figure 4. Customer and employee orientation as fundamental principles of internal marketing



(Source: adapted from Meffert and Bruhn, 2012)

Figure 4 shows that the company, customers and employees build a relational triangle that is based on employee and customer orientation. External marketing involves the relationship between the company and its customers. The relationship is characterised by classical marketing instruments, such as the product, service, communication, distribution and contracting policy (Meffert, 2000; Meffert, 2011). Internal marketing, on the other hand, is focused on the relations between the institution and its employees. Internal marketing activities often involve the recruitment of employees, their training and development, and their intrinsic and extrinsic motivation. In this context, employees are often regarded as internal customers. Satisfied employees will identify with their institution and do a better job (Meffert, 2000; Meffert, 2011). Interactive marketing as the third element of the relational triangle consists of the relations between employees and external customers. An important aspect of this relation is the adjustment of employees to customer wants and needs. Interactive marketing is an indicator whether employees are committed to the aims of the institution and if they understand marketing as a concept of corporate culture (Meffert and Bruhn, 2012). The entire triangle is influenced by the competitors, the market, partners (joint ventures/suppliers), and the environment (political/economical).

How might the relational triangle of employees, customers and institution be applied to the internal marketing of a university? What are the relevant aspects to consider? Relevant quality aspects are the material which lecturers provide to their students. Is the material up-to-date, does it meet the expectations of the students and which media are used to provide students

with information? Furthermore, the students play an important role in ensuring the quality of performance of an institution. A main precondition in this context is that the performance level of the students is homogeneous (Voss, 2009). Private universities have to make sure that they achieve a homogeneous performance level of their students by applying standardised criteria within the application process. To ensure this, assessment tests, interviews with admission tutors or their A-level grade can be used as selection criteria.

Another important aspect of the relationship triangle is the quality of the administration service. This includes the processing speed of administrative procedures, such as replies to student emails and the problems of students or lecturers. Transparency and streamlined non-bureaucratic structures support these processes. An important factor is also the customer orientation of the staff members.

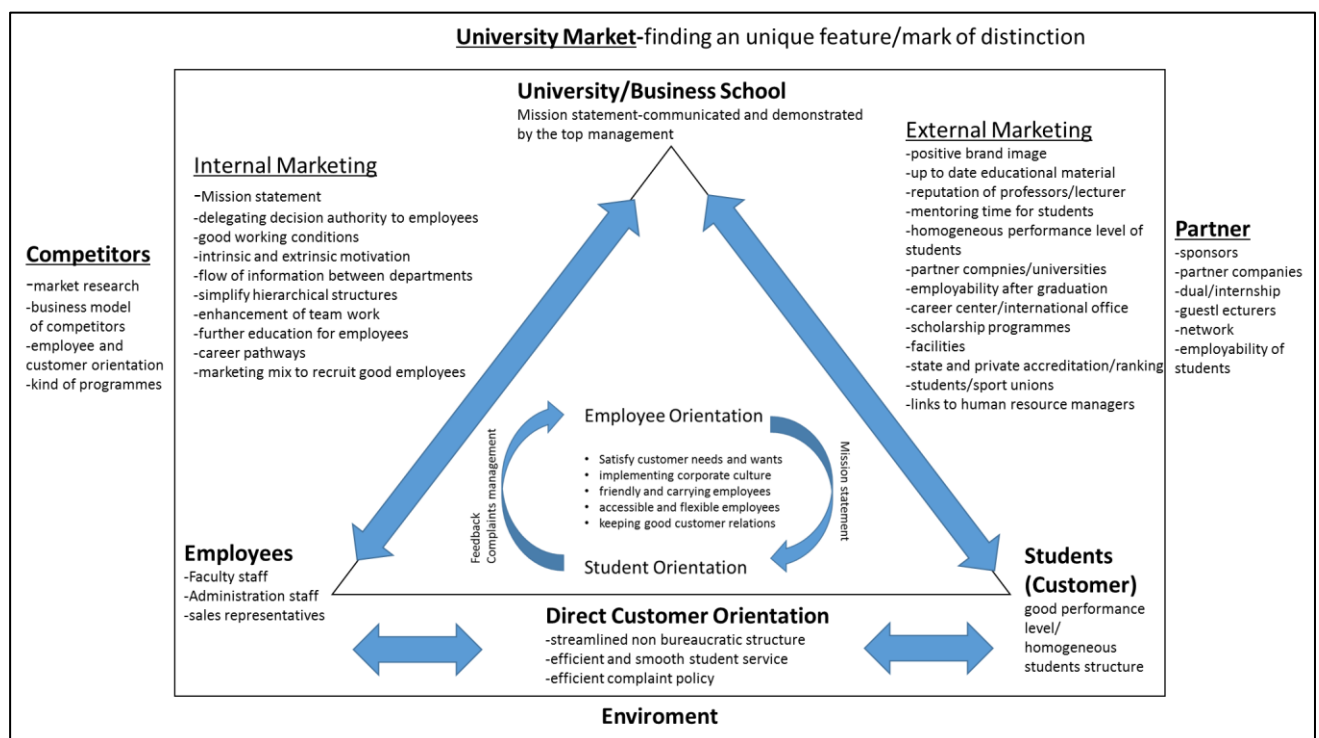
As discussed in chapter 3.3 service departments, such as the career center or international office, are indicators of good or weak quality performance (Voss, 2009). The assistance for students in organising internships or studies abroad also influences the evaluation of an institution. Students expect advice and information about how they can finance their studies and about its content. This requires that employees working in the student counselling services have to be competent: they have to know about scholarship programmes, dual study partnerships, the broad content of each study programme and possible jobs after graduation. Since employability is an important aspect of choosing a higher education institution (Voss, 2009), student counsellors should be able to give students competent advices about possible career pathways.

Additional services can be professional development programmes or seminars for project management, skills or modern leadership techniques. Some university offer university in-house workshops to further qualify their students (Gate Germany, 2010). Regular monitoring of the above mentioned aspects is essential in order to ensure the quality of the performance of an institution. Possible instruments to determine the performance and the quality are evaluations of the lecturers, career center and other student counselling services. Furthermore, state and private accreditations as well as rankings of universities are significant indicators of their service level (Voss, 2009). Other quality indicators are the support/mentoring quota of professors and students as well as the response times of the administration. Most universities offer value-added services in form of accommodation support, healthy canteens, coffee bars, banks,

book shops or supermarkets. Also student unions as well as sport and music groups may help to build a brand image. A positive brand image of a university supports a reliable and serious feeling. Consequently, universities have to build a positive and well-known brand image to gain a competitive advantage over their rivals. Another relevant aspect of quality performance is the complaints policy of a university. Feedback and complaints should be used to identify shortcomings and to improve the structures and processes. A good complaints policy will increase the performance quality and lead to student satisfaction. The student satisfaction will than support a positive brand image which helps to gain market share (Voss, 2009).

3.4.3 The Relationship between Internal and External Marketing at Higher Education Institutions

Figure 5. Internal and external marketing as principles in the higher education sector



(Source: adapted from Meffert and Bruhn (2012))

Figure 5 illustrates the various influences of internal and external marketing activities within the higher education sector. The relationship triangle is characterised by three important factors namely, the employees, the university, and the students. Employees are faculty and administration staff. Furthermore, hired sales representatives (i.e., at university fairs) can be regarded as staff members as well. Especially at private universities students have to recognize

that they have to perform and that paying tuition fees does not automatically lead to a degree. The relation is easier when they are a homogeneous group which could be guaranteed by standardised entrance tests. The direct customer orientation involves the exchange between university staff members and students. This is supported by streamlined and non-bureaucratic structures, efficient student service processes and systematic complaint management. The core aspect within the relationship triangle is the relation between employee and student orientation. Employees have to satisfy customer needs and wants, implement the corporate culture and keep good relations to students. On the other side, students give feedback, but are regarded to be active and hard-working as well.

The internal marketing between employees and the university consists of enhancing employees activities. The external marketing activities between the university and its students are characterised by the brand image and reputation of the institution. This is particularly influenced by the reputation of academics, partner companies, sponsors, company scholarships and especially the employability of students after graduation. Other factors are the educational materials, mentoring time for students, performance level of students, facilities, student unions, the career center and international office as well as partnerships of the institution.

The internal and external marketing activities are strongly influenced by the market, competitors, partners and the overall environment. Universities have to find their mark of distinction within the higher education market. To gain competitive advantage over similar universities is essential. To screen the market, analyse competitors, learn from them, and build a positive image are relevant strategies to positioning an institution within the market. Partners can help universities in this process. For example, cooperations with well-known companies lead to a positive and confidential image of the institution. Furthermore, partnerships with companies are an indicator of employability after graduation. Environmental aspects can be political support, financial help in form of private sponsors (companies or patrones) and public funding (Frank et al., 2010).

3.5 Conclusion

Private universities try to attract and recruit students mostly by functional service criteria such as university company partnerships, dual study programmes, better mentoring, friendliness of academic and professional staff, school-class lectures or modern facilities. Furthermore, next to the above mentioned service quality criteria, academic as well as non-academic criteria are relevant selection criteria for prospective students. The literature review identified that different research studies determine important non-academic, academic, technical and functional criteria which are often important within the students' decision process. It will be difficult for a private university to consider and address all the researched students' criteria for a recruitment and marketing strategy. Therefore, private Universities have to find about types of students and have to analyse in detail which selection criteria have been important within the students' decision process. To divide the student body in different types of students and to subdivide these types by demographic criteria will support to develop a more specific marketing and recruitment strategy for a private university.

4. Appropriate and Justified Methodology

4.1 Introduction

In particular, the following research questions, based on the gaps in the literature review, will be addressed:

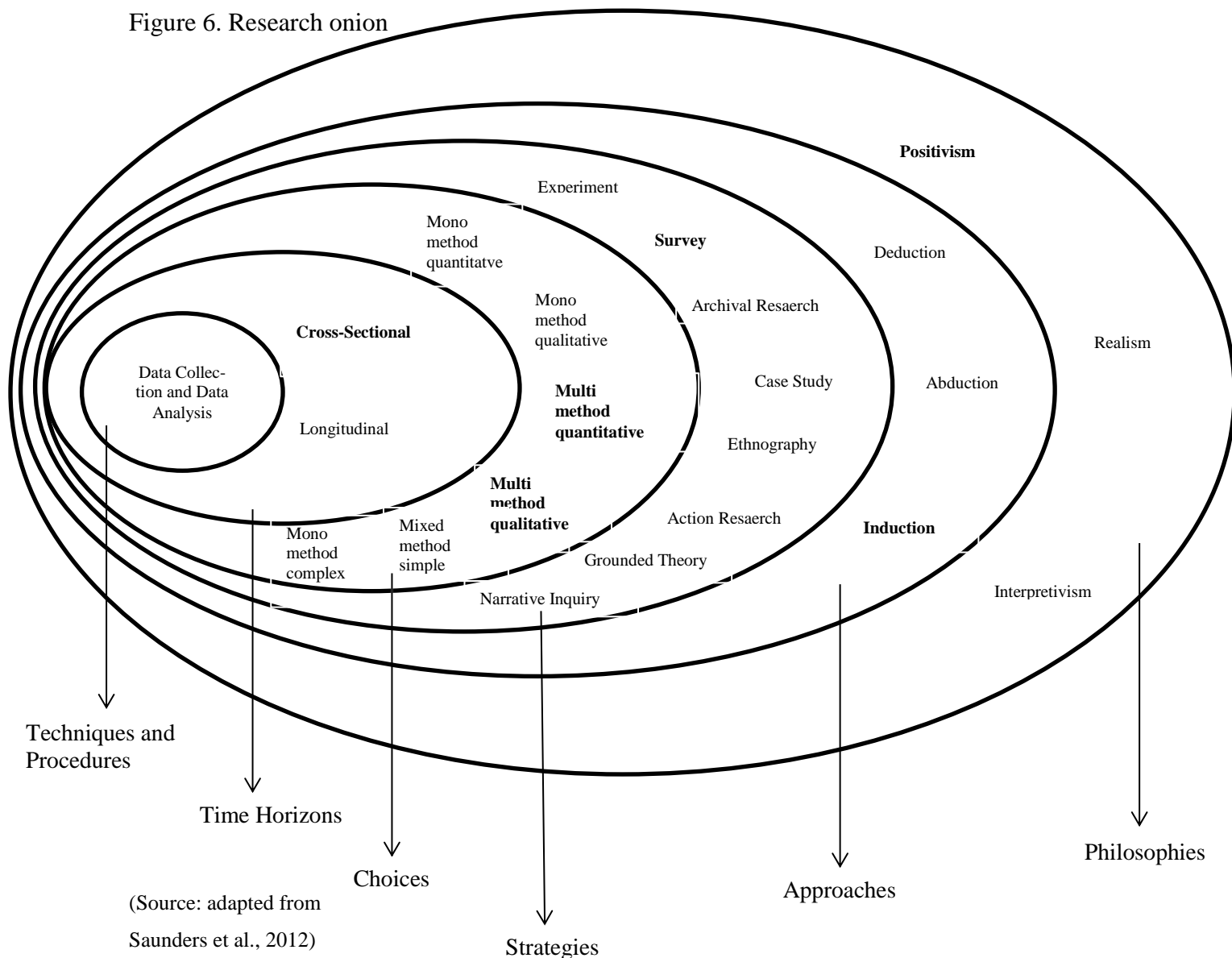
1. What are the most relevant criteria for students in their decision process for a private business and management university? Does the identification and evaluation of selection criteria differ between different target groups?
2. Do these criteria differ for student recruitment, and if so, how might this be used to form recruitment strategies by universities?
3. Can different types of students be identified who regard different criteria as relevant when deciding about a private university? How can private universities adapt their market segmentation and marketing mix to specific target groups.
4. How can private universities in Germany improve their marketing activities in order to recruit and keep qualified students? How can relevant information about students' selection strategies be integrated into a conceptual model of marketing and recruitment at German private universities.

The first step of the research process is to identify relevant and interesting research gaps in the literature. In addition, adequate research methods have to be selected that are able to address the research questions and gaps in a systematic way. Therefore, it is often recommendable to formulate the research objectives in the form of what, when, where, why, who or how questions (Eriksson and Kovalainen, 2008). The research questions emerge after the research process has started. Furthermore, preliminary research questions often lead to further research ideas, questions and research objectives. In order to structure this process and to present its results in a systematic and comprehensive way, the choice of an adequate research method is needed (Saunders et. al., 2012). The aims, paradigms and methods of a research project are often changing with in the course of a research project (Saunders et al., 2012). Therefore, it is important to turn the research question into a structured research process (Eriksson and Kovalainen, 2008).

In the previous chapters it has been stated that there are several important questions in the context of private universities in Germany that have not been addressed in the literature yet. Therefore, an adequately empirical study is needed to answer these questions. Before we discuss the main results of this study, the research methodology will be explained. First, some general considerations with regard to various research approaches will be made before the research approach of this PhD thesis will be outlined. A possible research process, the research onion of Saunders et. al. (2014) will be described and discussed. The research onion is characterised by a process from the correct finding of the research philosophy to the best possible research techniques of data collection. The chapter 4.2 describes and analyses the advantages and disadvantages of a possible research method, the research onion

4.2 Research Onion: Explanation and Selection of an Appropriate Research Methodology

Figure 6. Research onion



In order to categorize various research philosophies and methods, Saunders et al. (2012) use the illustration of a research onion that consists of six research rings (Figure 6). In the following, this research onion will be explained and the most appropriate approach for this study will be selected.

4.2.1 Positivism, Realism, Interpretivism as Potential Research Philosophies

The outer ring of the research onion classifies the research philosophy. In the early stage of the research process, it supports finding the best possible data collection method which plays a significant role in the end of the process. The research philosophy aims at selecting a research solution in form of a type of evidence to analyse the research problem. It is significant to answer possible research questions by identifying and developing a research design (Easterby-Smith et al, 2002). Different research philosophies such as realism, interpretism, pragmatism and positivism support the research design and implicate different research options which will be explained in the following.

Realism comes from the reality which exists independently from human thinking and beliefs. Researchers have to make individual interpretations of a research phenomenon to understand social structures, effects and relations. For this research philosophy, especially qualitative methods are suitable because social phenomena and relations are often complex and unique. Realism is characterised by analysing and interpreting social phenomena or objects. Researchers who use this philosophy try to explain how people perceive the world. Therefore, the philosophy is particularly suitable for analysing human social structures and relations. However, the aim of this thesis is to explore the expectations and experiences of German state and private university students and their most considered selection criteria. To realise this aim, the analysis and interpretation of a larger amount of data plays an important role as they allow filtering the most important selection criteria and specific types of students who choose a state or private university. On the contrary, the social structure, social relations or social phenomena of students are not to be analysed. Therefore, realism is not regarded as appropriate philosophy.

Interpretivism also uses often qualitative methods, such as expert interviews. While they allow for a deeper understanding of complex social interactions, it is often difficult to generalize and find patterns based on qualitative methods (Kusterer, 2008). Researchers argue that an

interpretive philosophy is appropriate especially for research topics in marketing or human resource management (Watson, 2010). However, critics argue that business situations are very complex and therefore outcomes not generalisable (Saunders et. al., 2012). An important aspect of this study is to develop a conceptual model of service marketing. This model relies on collected data and is based on an extensive literature review. Although, qualitative interviews may be useful in this regard, they are mainly used for the development of a subsequent questionnaire and to find out about appropriate survey questions. Therefore, interpretivism is also not regarded as appropriate research philosophy.

Positivism tries to find out how things are. Most researchers who use this approach collect data about an observable reality which has links and relationships to theories, concepts or models. Positivism assumes that researchers take findings from their observations which can then be generalised in rules, strategies or methods. The positivism approach is mainly based on quantitative methods which help to derive principles (Kusterer, 2008). The research philosophy is characterised by a structured method and precise empirical data. The objective is to find out and uncover the truth of a research topic. Although, this thesis does not concentrate on testing existing theories etc., it is based on an extensive literature review, previous empirical studies and conceptual models of service marketing as explained in the previous chapters. Positivist research will use a structured methodology, structured and measurable data which is not influenced by the researcher's values and often generated by large surveys (Saunders, 2012). In addition, objectivity and validity are important characteristics of this philosophy. The collected data of this study is highly structured and is analysed with statistical methods. Therefore positivism is regarded as the most appropriate philosophy for the research design.

4.2.2 Which Research Approach: Induction, Deduction or Abduction?

After deciding about the research philosophy, a deductive, inductive or abductive research approach has to be selected. Researchers such as Easterby-Smith et al. (2003) argue that a positivist research philosophy is more likely linked towards a deductive approach. In contrary, an inductive research approach concentrates on concrete experiences which will be analysed and later reflected to form a concept or model.

The **deductive research** approach is characterised by developing hypotheses based on an existing theory (Saunders et al., 2012: 144; Wilson, 2010). It is orientated mostly on theory and

tries to evaluate or extend existing explanations of a given phenomenon (Easterby-Smith et al., 2003) Hypotheses will be developed and afterwards validated by quantitative methods (data). The focus of the deductive approach is therefore theory testing (Saunders et al. 2012). A clear classification of which research approach belongs to which research philosophy (positivism, interpretism or realism) is difficult (Saunders et al., 2012). Since, this study is not build on a theory or hypotheses, a deductive approach is not appropriate. Instead, the author aims to explore and analyse the expectations and experiences of students and to develop a conceptual service marketing model for higher education institutions.

The **abductive approach** is used to explore a phenomenon, to identify themes and explain patterns to generate or modify an existing theory (Saunders et al., 2012). The aim of this the thesis is not to modify an existing theory or to explore a general phenomenon. Therefore, an abductive research approach is not appropriate.

An **inductive research** approach helps to explore, describe and analyse a research topic in depth as well as to use the collected data to identify patterns and relationships. Its focus is on theory and conceptual framework development (Saunders et. al, 2012; Cooper and Schindler, 1998). As Saunders et al. (2012: 146) pointed out, an inductive research approach is mainly appropriate to formulate a theory or a conceptual framework. The development of a conceptual service marketing model for higher education is one of the key aspects of this thesis. As mentioned in the previous chapters, a comprehensive theory of service marketing at higher education institutions does not exist yet. Firstly, a small number of experts will be interviewed about students' selection criteria, expectations and experiences. On the basis of these interviews results and a comprehensive literature review, a questionnaire for a quantitative survey will be developed. This study is also exploratory and consists of several questions. By following an inductive research approach, the author has the opportunity to gain more information about students' decision and evaluation processes and more insight about marketing and recruitment in the higher education sector.

4.2.3 Selecting the Appropriate Research Strategy

The next step is the selection of an adequate research strategy. Generally, eight strategies can be distinguished.

The **experiment** is a classical research strategy developed in the natural sciences. Its aim is the collection of data through standardised procedures. The data are often analysed by methods of statistics in order to generalise regularities or outcomes. Experimental research is often used in sciences such as physics, chemistry, biology or medicine and therefore not an appropriate research strategy in this context (Saunders et al., 2012).

Ethnography as a qualitative research strategy is suitable for studying groups. Ethnographers are interested to study people in groups who interact with each other (Saunders et al., 2012: 181). This thesis will not study people in groups, but individual decision making. Therefore, this research strategy is not regarded as appropriate.

The **case strategy** is the opposite of experiments and based on the analysis of real life projects. The difference between surveys and case studies is that the latter is not limited to a certain number of variables or other important data. Instead it is characterised by a broad understanding of the context and the research process (Saunders et al., 2012). Case studies are often used as a research strategy for exploratory and explanatory research. Since it is often difficult to generalize the results of case studies, they are often combined with quantitative research methods (triangulation). This may involve, for example, interviews, observations, documentaries and questionnaires (Saunders et al., 2012: 179). However, a case strategy is not appropriate in this context as it mostly focus on organisations, while this study relates to individuals. Moreover, the aim is not to explore extreme or specific cases but to analyse a representative group of students (Eisenhardt, 1988).

Action Research is often applied to analyse change processes in companies (Kusterer, 2008). This may involve, for example, reorganizations, the introduction of new technologies or post-merger integrations. As this is not the aim of this study, this research design is also not appropriate.

The **Grounded Theory** is characterised by a combination of inductive and deductive research approaches. This research strategy is often used in empirical qualitative social research (Glaser and Strauss, 1967). Its aim is to develop a theory which then can be tested in practice. Data will be collected without formulating a prior theoretical framework in the form of research gaps or research questions. The collected data will be then used for developing a theory which may be tested in subsequent research. This thesis will not develop a new theory. Also, it is based on explicit research questions and established research and conceptual models (Locke, 2001). Therefore, grounded theory is not regarded as appropriate research strategy.

Narrative inquiry is closely linked to qualitative interviews and describes the nature or outcomes of an interview. The narrative strategy is useful for a very small number of research participants (Saunders et al., 2012), for example, by interviewing a small number of professors or university staff members about their experiences with student expectations and experiences. Expert interviews are an important part of the thesis. However, the outcomes of the expert interviews will be mainly used to develop a subsequent quantitative questionnaire. Therefore, a narrative inquiry research strategy will be not appropriated.

The **survey strategy** is often used in business and management research. It is useful for exploratory or descriptive studies (Cooper and Schindler, 2006). The survey strategy considers the collection of quantitative data which will be later described and analysed by using statistical methods. The strategy is useful to test the relationships between independent and dependent variables and helps to develop models of complex relationships (Saunders et al., 2012). An important advantage of the survey strategy is that it gives the researcher a high amount of control about the research project as research questions and answering categories can be determined ex ante. Furthermore, surveys can include a large and diverse research population And the results can be generalized to a large degree. This differentiates surveys from other research strategies (Saunders et al., 2012).

In this context, the advantage of the survey strategy is that it allows collecting data of a larger number of students and for systematically analysing their selection and evaluation criteria. Moreover, standardised questionnaires are an appropriate research tool to compare students at state and private universities and to analyse the influence of individual characteristics on their selection and evaluation criteria. The quantitative survey of the thesis is based on a small sample of semi-structured expert interviews and the outcomes of the literature review. Semi-

structured interviews support the answer of a large number of questions and complex relations of variables (Saunders et al., 2012). An important aspect of using semi-structured interviews is the quality of the received data which are related to the aspects of reliability, forms of bias, generalizability and validity (Saunders et al., 2012).

On the basis of these considerations, a semi-structured interview was developed and three experts of the state and private university sector in Germany were interviewed. Before the semi-structured interviews, the interview guide has been distributed to the experts to allow them to familiarize themselves with the questions. The questions of the semi-structured interview are closely linked to the quantitative questionnaire which was distributed to students at the University of Hamburg and a private university in Hamburg.

A quantitative research design in form of a survey (questionnaire) can be also combined with an inductive approach (Kromrey, 2009). Usually a survey strategy is linked to a deductive approach (Saunders et al., 2012). Therefore, the survey strategy is regarded as an appropriate research strategy for this thesis.

4.2.4 Selecting the Appropriate Methodological Choice

Research strategies are supported by different mono or multiple methods. Mono methods can be either quantitative or qualitative and multiple research methods are characterised by more than one data collection technique.

A **multiple method design** combines more than one data collection technique. That implicates that the researcher can use qualitative and quantitative methods. This can be suitable when some aspects of the research topic have already been analysed extensively while others are not yet well understood. **Qualitative research** is aimed to explore the experiences of people and how they interpret them. It is linked closely to the interpretative research approach and often uses expert interviews as research strategy. Qualitative research can be either deductive or inductive (Gummerson, 2000; Patton, 2005). A **quantitative research design** is characterised by collecting, describing and analysing structured data. It is often linked with positivist philosophy and associated with a deductive approach. However, it is also possible to combine a quantitative research design with an inductive approach (Kromrey, 2009). Quantitative research often involves experimental and survey strategies using questionnaires, struc-

tured interviews and structured observations (Saunders et al., 2012: 163). Generally, it involves the collection of data, as well as their analysis and interpretation. In order to compare data from different sources (i.e. respondents and institutions), it is important that they are collected in the same way and that questions are understood in similar way. This study is based on a **multiple method approach** and applies qualitative and quantitative methodologies. Qualitative expert interviews are used to get further insights into the topic and to develop a well-grounded questionnaire. The questionnaire will then be submitted to a random sample of students and analysed with quantitative methods of data analysis.

4.2.5 Development of the Questionnaire and Choice of the Students Selection Criteria

A questionnaire (appendix 3) was designed that consists of two parts. The development of the questionnaire is mainly based on the empirical study of Hachmeister (2007) in chapter 3.1.5. This study analysed the decision criteria of 3.600 pupils in their final school year entering university in Germany. For this study Hachmeister (2007) considered the existing research at that point of time and adapted the studies of Guggenberger (1991), Bock (1991), Tutt (1991) and Binsardi and Ekwulugo (2003) (chapter 3). Thus, it is one of the largest seminal studies in the area of prospective students' decision making criteria in Germany. In the next step three expert interviews were conducted where the decision criteria used in the study of Hachmeister (2007) had to be evaluated. Based on the experts' evaluations these decision criteria were extended and adapted for the purpose of this study. The aims of this study were to identify the most important students' expectations and experiences of undergraduate students, their relevant selection and evaluation criteria and specific types of students to recruiting to private universities.

Some criteria mentioned in previous studies (chapter 3.1) were excluded. Due to the specific conditions of the German education market, for example the vast majority of German students choose a university that is close to their parents' home (Hachmeister, 2007). The same applies to tuition fees which are not relevant for state universities and highly regulated at private universities as they are not-for profit organisations. Since these factors can therefore hardly be influenced by university marketers, they were not included in the questionnaire.

The first part of the questionnaire pointed out the importance of selection criteria by choosing an institution and the second part emphasised the importance of criteria from students' evaluation perspective. For both parts 11 criteria based on the literature review (chapter 3) and

expert evaluations (chapter 6.2) were chosen. Also the questionnaire considered personal demographics such as age, gender, links to private institutions, background of the parents, employment status of parents, work experience of the student, city of origin and nationality. The questionnaire was tested in a pilot study with 25 students and subsequently improved to increase validity. Especially some misleading questions were rephrased. Table 14 shows the relevant student criteria being named and discussed in the considered research (chapter 3) as well as in the expert evaluations (chapter 6.2) and therefore included in the study.

Table 14. Considered student selection criteria for the questionnaire

Number	Student Selection Criteria	Studies
1	Image of the Institution	Hachmeister (2007); Expert evaluations: Prof. Dr. Holtbrügge; Prof. Dr. Berg
2	Academic Reputation	Binsardi and Ekwulugo (2003); Hachmeister (2007); Expert evaluation: Dr. Lobin; Prof. Dr. Holtbrügge; Prof. Dr. Berg
3	Research Reputation	Binsardi and Ekwulugo (2003); Expert evaluation: Prof. Dr. Berg
4	University Fair-Positive Impression	Bock (1991); Tutt (1997); Expert evaluation: Dr. Lobin; Prof. Dr. Berg
5	Recommended by Friends	Guggenberger (1991); Tutt (1997)
6	Ranking of the Institution	Tutt (1997); Expert evaluations: Prof. Dr. Holtbrügge; Prof. Dr. Berg
7	Reputation of the Professors	Expert evaluation Prof. Dr. Berg
8	Fluctuation Rate of Lecturers	Expert evaluations: Prof. Dr. Holtbrügge; Prof. Dr. Berg
9	Employability after Graduation	Guggenberger (1991); Binsardi and Ekwulugo (2003); Hachmeister (2007); Expert evaluations: Dr. Lobin; Prof. Dr. Holtbrügge; Prof. Dr. Berg
10	Close links to Companies	Guggenberger (1991); Expert evaluations: Dr. Lobin; Prof. Dr. Holtbrügge; Prof. Dr. Berg
11	Very good Facilities	Binsardi and Ekwulugo (2003); Hachmeister (2007); Tutt (1991); Expert evaluations: Dr. Lobin; Prof. Dr. Holtbrügge; Prof. Dr. Berg

4.3 Time Horizon and Data Collection

The next step of the research process is the selection of a suitable time horizon. The time horizon is interrelated to the research strategy and determines if data is collected from various respondents at one point of time (cross-sectional) or from one respondent at various points of time (longitudinal).

Two time horizon strategies can be distinguished. A **longitudinal time horizon** is characterised by multiple observations of a research problem and the development of the research project over a longer period of time (Hasset and Paavilainen, 2013). An example of the latter is change processes in companies (Kusterer, 2008). While this thesis aims to compare expectations and experiences before and after entering a higher education institution, a longitudinal design would be appropriate. However, this would be confronted with several challenges. First, it would be difficult to identify future students of state and private universities before they entered this institution. Second, longitudinal studies require a panel design, i.e. the same students should participate in the study at two different points of time. In the case of this study, a time frame of at least one year would be required that allows students to make sufficient experiences with various lecturers and professors, examinations, student services, foreign offices and other relevant departments and services. Such a long time frame, however, would make it difficult to administer the survey and to ensure an acceptable response rate. Therefore, a quasi longitudinal strategy will be used by asking students to report about their expectations before and experiences after they entered a higher education institution.

Cross-sectional designs are useful for snapshots of a research problem. They are often used in surveys and are appropriate to analyse causal relationships between various dependent and independent variables (Scandura and Williams, 2002). Since this study aims at exploring the relevance of various selection criteria and their relationship with demographic characteristics, such as age and gender of students a cross-sectional design is regarded as appropriate. Moreover, it allows for comparing students at different higher education institutions, i.e. state and private universities. The **core of the research onion** is the selection of appropriate methods of data collection and analysis. This involves choosing suitable research objects and participants (sampling). Different methods are possible to collect appropriate data. One method is the observation of a research problem or participants of a research project. The observation method supports empirical learning from an external perspective (Kusterer, 2008, 83). Another method to collect data for a research project is interviews. This qualitative technique in-

volves a direct interaction with the participants in the research project. It can be distinguished between standardised and semi-standardised interviews (Glaser and Strauss, 2012). Standardised interviews include a fixed interview approach where participants cannot deviate from the interview guide. Thus, this interview technique is very structured and planned. On the contrary, a semi-structured interview allows the participant and the researcher to differ from the interview guide. An advantage of semi-structured interviews is that aspects can be discussed which were not regarded as relevant at the beginning of the research process (Saunders et al., 2012). As this aspect is also relevant for this study, a semi-structured approach is also used for the expert interviews. The subsequent survey is then based on a quantitative research approach. However, the appropriate quantitative data collection for this study was done by questionnaires and followed the survey strategy.

4.4 Process of Sample Selection of 180 Students

Figure 7. Process of sample selection of 180 Students

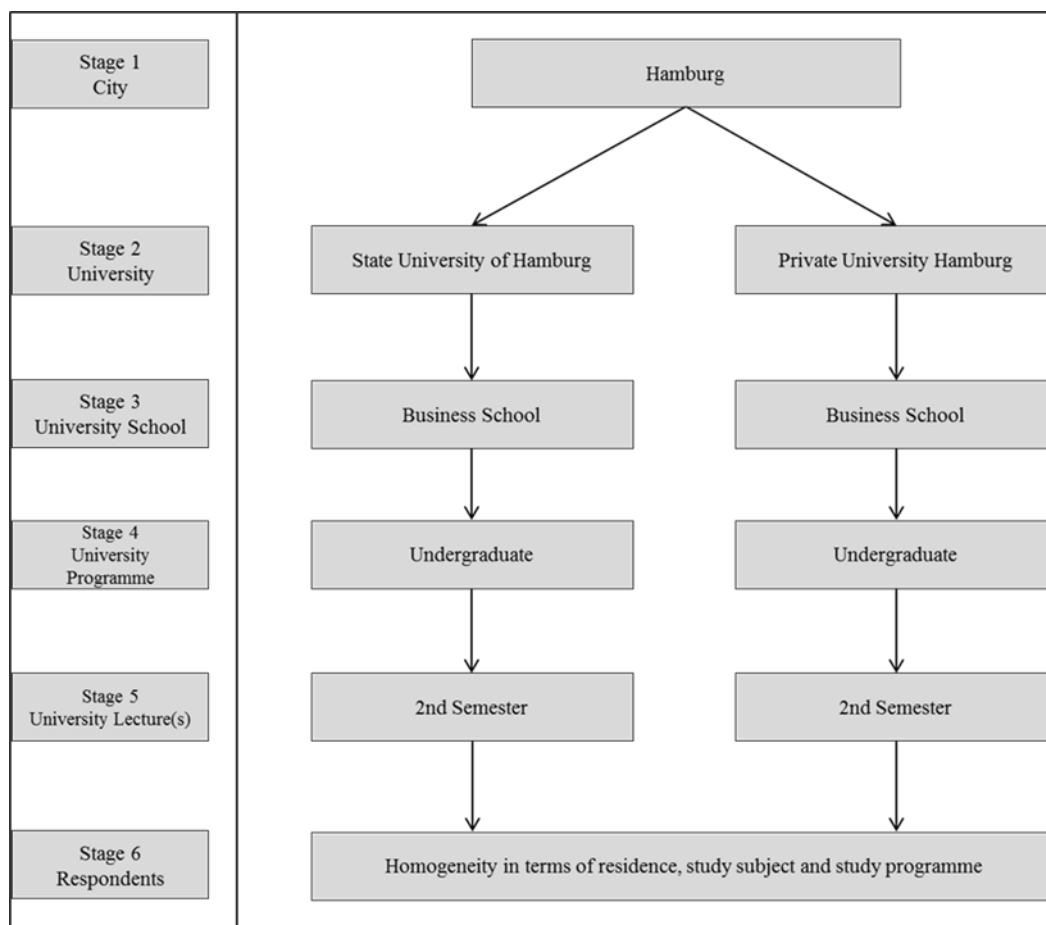


Figure 7 shows the stepwise process of the sample selection of the 180 students.

Stage 1

Firstly, the process of sample selection started with the choice of a suitable city (Stage 1).

The city of Hamburg was selected for specific reasons such as being the second biggest city in Germany and very attractive for future students (Statista, 2013).

Stage 2

The second stage involved the selection of the state university and the private university. The most important reason for the choice of the University of Hamburg is the fact that it is by far the largest and oldest University in the city with the broadest spectrum of study programmes. An alternative choice would have been the Technical University of Hamburg. However, this university offers only a very narrow spectrum of subjects and thus represents only a minority of students in Germany (TUHH, 2014). For the choice of the private university the same selection criteria were employed. Furthermore, the selected private university is one of the oldest private higher education institutions in Hamburg and offers a wide range of study programmes in different subjects.

Stage 3

The third stage considered the choice of school within the universities. At both institutions the focus was on student of business administration and management. As they represent the largest group of study subjects in Germany (Statista, 2016). 231.787 students were enrolled in business administration and management subjects while the second largest is mechanical engineering with 119.102 students. Thus, is also illustrated by the fact that 72 out of 109 private universities focus on business administration and management subjects (appendix 1).

Stage 4 and 5 (University of Hamburg)

Since one of the aims of the thesis is to analyse the relevance of different selection criteria the final sample should include students in their early stages of study. For this reason, in stage four undergraduate students were selected. At the state University of Hamburg access was offered to a compulsory lecture “Grundlagen der Unternehmensführung (Fundamentals of Management)” by Prof. Dr. Berg. This compulsory lecture was offered for students in the 2nd semester. In stage five the aspect of convenience played a significant role. All students were in one lecture hall, being together and therefore the author had an easy access to respondents.

After Prof. Dr. Berg finished the author explained to the students the purpose of the study, the structure of the questionnaire and asked approximately 250 students to complete the questionnaire on a voluntary basis. However, 90 students stayed in the lecture and completed the questionnaire. The students were given 20 minutes to answer all questions and afterwards 90 questionnaires were collected and 87 questionnaires have been completed.

Response rate: $90/250=36\%$

Stage 4 and 5 (private University)

To ensure equivalence of data collection a similar approach was followed at the private university. Here, access was offered to two undergraduate management lectures (stage 4) compulsory for students in the 2nd semester (stage 5). Since classes are much smaller than at the state university, two instead of one class had to be selected. The aim was to receive a similar number of completed questionnaires as at the state university. As the selection and evaluation of students expectations and experiences is a sensitive topic for the private university the author was only allowed to distribute questionnaires to lecturers. The lecturers of these two classes were provided with 90 questionnaires in total. The administration of the data collection process by the two lecturers ensured a higher response rate of 72 % and 65 completed questionnaires. The aspect of convenience played also a significant role. All students were in one lecture hall, being together and therefore easy access to respondents.

Response rate: $65/90=72\%$

Stage 6

The last stage (stage 6) of the stepwise selection process guaranteed that are the respondents in the two sub-samples (state and private university) are comparable in terms of residence (Hamburg), study subject (business administration and management) and the study programme (2nd semester). Now significant differences in terms of the respondents' age are revealed. The average age is 21.97 years of students at the compulsory lecture in fundamentals of management at the state University of Hamburg and at the private university 21.25 years (chapter 5.2). The nationality composition reflects the fact that private universities in Germany are mostly very young and not yet included in international rankings which reduces their ability to attract a large number of foreign students. At the lecture in fundamentals in man-

agement at state University of Hamburg, 23 % of the students are foreigners while this number is only 9.3% at the private university (chapter 5.2).

Determination of the sample size

The goal of survey research is to collect data that is representative of a larger population. Representativeness means in this context that the data collected in the survey can be generalised to the entire population (Saunders, 2012). A population is the collection of data which is interesting for the research project and helps to answer the research questions. Compared to a census method, a sample is easier to carry out. Reasons for preferring a sample over a census are, for example, the costs of a census, the time of a census, and the difficulty to reach a whole population (Cooper and Schindler, 1998).

In order to derive a representative sample it is essential to determine the appropriate sample size. Inappropriate, inadequate and excessive sample sizes continue to influence the quality and accuracy of research. Within a quantitative survey design, determining sample size and dealing with nonresponse bias are therefore critical aspects (Bartlett et al., 2001). A major advantage of surveys “is their ability to use smaller groups of people to make inferences about larger groups of people that would be prohibitively expensive to study” (Holton and Burnett, 1997:71). Therefore, it is important to determine the size of a suitable sample which is representative for the entire population. According to Bartlett et al. (2001), determining appropriate sample size in survey research depends on the type of quantitative data used in the study.

Quantitative data can be divided into categorical and numerical data. Categorical data refer to data whose values cannot be measured numerically but can be either classified into sets (categories) according to the characteristics that identify or describe the variable (Saunders et. al, 2012:475). Numerical data, on the other hand, can be further subdivided into interval data, ratio data and continuous data (Saunders et al., 2012). Numerical data is more precise than categorical data and allows applying more advanced methods of data analysis.

As will be explained later in chapter 5, the data used in this study are mainly numerical data in the form of continuous data. Continuous data is information that can be measured on a continuum or scale. It can have almost any numeric value and can be meaningfully subdivided into finer increments, depending upon the precision of the measurement system. As opposed to categorical data, continuous data can be recorded at many different points (Bartlett et al., 2001; Saunders et al., 2012). Examples of continuous data are statements or criteria measured

on Likert-scales (Sweet and Grace-Martin, 2011) which will be predominantly used in this study.

Based on these considerations, the aspired sample size was calculated on the formula of Cochran (1977). This formula aims to control for both alpha error (finding a difference that does not actually exist in the population) and beta error (failing to find a difference that actually exists in the population (Peers, 1996). The acceptable alpha level used in determining sample size in most education research studies is .05. However, an alpha level of .10 may also be used in explorative studies where the researcher is interested in identifying unknown relationships. For margins of error, existing research regards 3% margin of error acceptable for continuous data. Bartlett et al. (2001) have applied Cochran's (1977) formula and calculated appropriate sample sizes for different population sizes, data formats, and acceptable alpha errors and margins of error. For example, for a population size of 1,000, continuous data (acceptable margin of error = .03) and an alpha of .10, the proposed sample size is 77, for a population of 1,500 it is 79, and for a population of 2,000 it is 83.

In order to determine the appropriate sample size for this study, first the size of the population was identified. At the University of Hamburg, 1,119 students were enrolled in the bachelor programme "Business Administration" in the summer semester 2015 (Appendix 2). Similarly, 1,271 students were enrolled in the same subject at the private university which was selected for this study (Appendix 1, table 50). Based on the considerations of Bartlett et al. (2001) explained above and the fact that the relevant population at both institutions of higher education lies between 1,000 and 1,500 students, a sample size of around 90 respondents in both subsamples (in total 180 respondents) was regarded appropriate.

4.5 Conclusion

The thesis will examine and analyse the expectations and experiences of students at a private university. The study is based on an extensive literature review and questionnaires. The research philosophy is characterised by a structured research method. **Positivism** was regarded as the most appropriate philosophy for the research design. The aim of the thesis therefore was to explore the expectations and experiences of students and build on the basis of these outcomes a comprehensive conceptual model. An inductive research approach helped to explore, describe and analyse the gained information about students' expectations and experi-

ences. The study is characterised by quantitative data which will be described and analysed by statistical methods. The **survey strategy** considered quantitative data. The study applied qualitative (expert interviews) and quantitative (questionnaire) methodologies. The thesis concentrated on a snapshot of the research problem and therefore a **cross-sectional** time horizon design will be regarded.

The following methodology approach has been considered for the thesis.

Figure 8. Methodology approach of this thesis



5. Measurement and Research Findings

5.1 Introduction

Measurement in research is characterised by selecting observable processes of empirical research, to cluster the outcomes in numbers or symbols (Cooper and Schindler, 1998). However, before measuring something it is important to define what the researcher wants to measure, to evaluate and to define the concept (Saunders et al., 2012). Concepts or scientific research constructs help to explain observations made by the researcher and his research methods to analyse and evaluate a specific research topic. Concepts in scientific research are called constructs and are the outline and research approach. Both measurement approaches help to analyse research observations. The conceptual definition is closely orientated to definitions of other researchers on this concept. The key idea of a concept will be kept and discussed. On the other side, an operational definition approach considers and describes a concept to specify the processes and procedure of a research topic (Diamantopoulos and Schlegelmilch, 1997). The operational approach analyses and points out possible measurement tools and variables to determine a specific behavior or conceptual definition. However, both measurement approaches are important to explore and to analyse key variables of students marketing, service marketing and service quality (Bruhn, 1998; Brady et al., 2002).

Most constructs are based on single-item scales which have several advantages compared to multi-item scales. Fuchs and Diamantopoulos (2009: 203) pointed out that, single-item scales are linked to concrete constructs in the context of the to-be-rated object, such as perceptions, intentions or favorability. Also, a single-item scale is “in obtaining a general view of the construct, the research objective and will be therefore an adequate purpose” (Fuchs and Diamantopoulos, 2009, 205). The single-item scale is a method to gain an understanding for the general nature of a construct and research problem (Lee et al., 2000) which in the context of this thesis is to find out in an exploratory study about students expectations and experiences. Single-item scales can also be recommended for their flexibility in investigating about items which will determine and measure specific criteria, such as personal satisfactions, expectations or experiences (Oshagbemi, 1999: 393; Fuchs and Diamantopoulos, 2009; Dao and Thorpe, 2014). Personal satisfaction criteria can be compared with criteria which determine students’ expectations and experiences. Critics of single-item scales mentioned that this method categorise respondents into a relatively small number of groups (Netemeyer et al., 2003). However, the categorisation of respondents according to their selection criteria into small target groups

can even be regarded as positive as this is one of the main research aims. An example of single-item scale is the study of Kallio (1995). She examined selection criteria which affect the college choice decision of American graduate students. Important students' decision factors were academic reputation, university facilities, employability after graduation, links to companies or recommendation by friends (Kallio, 1995). The data analysis was carried out in several steps. The first step was a bivariate analysis followed by a multivariate regression analyses to determine dimensions of students decision (Kallio, 1995: 113). Furthermore Dao and Thorpe (2014) showed how single-item scales enable researchers to find out about students choice criteria. The authors considered selection criteria, such as facilities, services, the programme, price, advertising, parents' opinion and financial aid, and asked the students to rate the extent to which these factors influence their choice of university. The selection criteria had to be evaluated on a five-point Likert scale, moving from unimportant to very important (Dao and Thorpe, 2014: 670).

Based on the above considerations and existing research it is argued that single-item scales are appropriate to measure students' expectations and experiences at state and private universities. Consequently, the measurement scheme consists of five categories to determine the importance of the questioned variables and factors of choosing a higher education institution ranging from 1=not important at all and 5=very important (Table 15).

Table 15. Measurement scheme

Measurement Scheme	Assignment of Numbers
Five Categories	1=not important at all
	2=less important
	3=roughly important
	4=almost important
	5=very important

(Source: adapted from Saunders et al., 2012, 445)

All data were manually gathered and analysed with the software package statistica.

5.2 Age, Sex and Nationality Structure of Respondents

First, the sub-sample for the state University of Hamburg will be considered, before the focus will be shifted to the private university. Table 16 shows that the majority of the 87 respondents come from Germany. A small minority have another nationality.

Table 16. Nationality of respondents at the state University of Hamburg

Country of Origin	Number of Students
German	67
Other Nationality	20 (23%)

A reason for the small number of foreign students in the sub-sample is the language problem. Most of the undergraduate Bachelor programmes are taught in German language at state universities in Germany (DAAD-International Programmes, 2014). The DAAD (German Academic Exchange Service) points out that just five state universities in Germany offer a Bachelor degree in Economics, Business Studies or related business subjects in English language. Most offered Bachelor programmes in business studies, economics or related topics which are taught in English language are offered at private universities in Germany (DAAD-International Programmes, 2014).

Figure 9. Age structure of the respondents at the state University of Hamburg

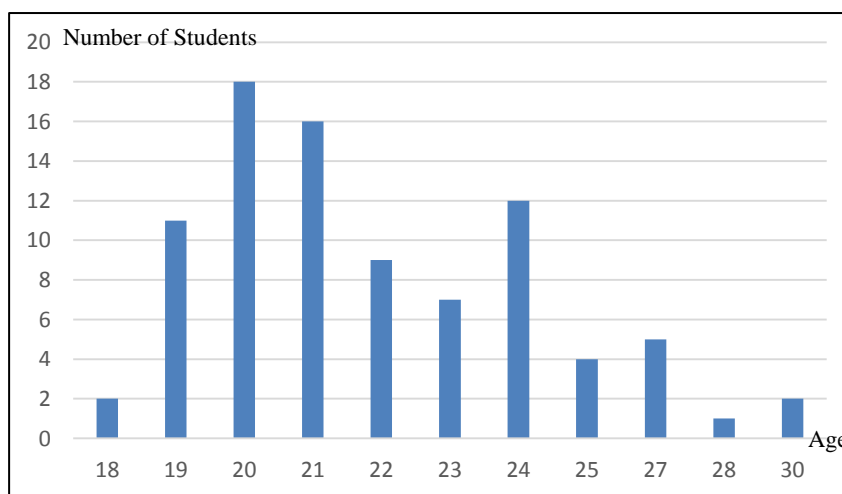


Figure 9 shows that the majority of respondents at the state University of Hamburg is aged twenty (18 students) followed by students aged twenty-one (16), twenty-four (12) and nineteen (11 students). The majority of the respondents are aged between nineteen and twenty-four. Table 5.3 revealed the gender of the respondents at the state University of Hamburg. The questionnaire was answered by 42 female students and 45 male students.

Table 17. Gender and age structure of the respondents at the state University of Hamburg.

Age	Female Respondents	Age	Male Respondents
18	1	18	1
19	7	19	4
20	8	20	10
21	5	21	11
22	5	22	4
23	4	23	3
24	7	24	5
25	2	25	2
27	2	27	3
30	1	28	1
		30	1
Total	42		45
Average Age		21.97	

The majority of the responding female students are between the age of 19 and 24 years while the majority of male respondents are in the age of 20 and 21.

After describing the sub-sample of respondents at the state University of Hamburg, the focus will now be shifted to the private university. Again, the sample structure will be explained in terms of age, gender and nationality. A detailed age structure helps to find out about the target groups and supports a sustainable recruitment strategy.

Figure 10. Age structure of the respondents at the private University in Hamburg

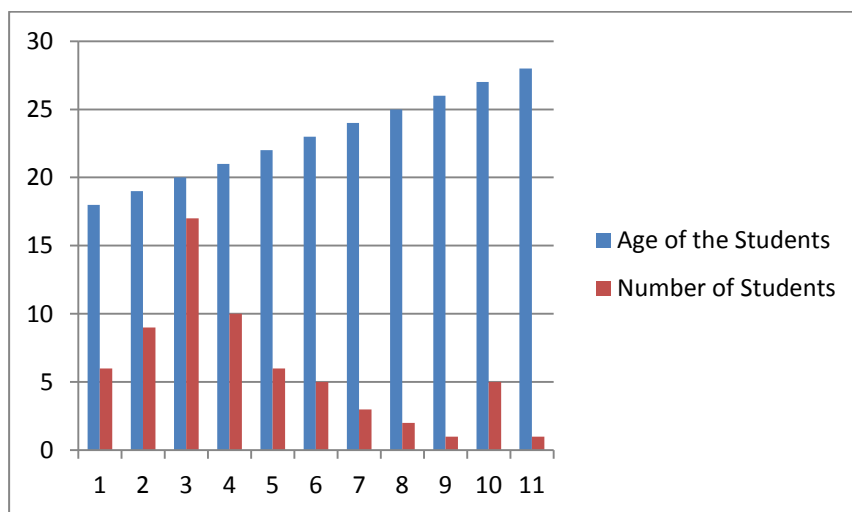


Table 18. Age structure of the respondents at the private University

Age of the Students	Number of Students
18	6
19	9
20	17
21	10
22	6
23	5
24	3
25	2
26	1
27	5
28	1
Total	65
Average Age	21.25

It can be clearly been seen in figure 10 and Table 18 that the majority of respondents are aged between 19 years and 21 years. This implicates that most of the respondents started their degree programme direct after finishing school. Furthermore, it makes sense to break down the number of female and male students in different age groups. Targeting specific age and gender groups helps to develop future marketing and recruitment strategies for private universities.

Table 19. Gender structure by age of the respondents at the private university

Age	Female Respondents	Age	Male Respondents
18	2	18	4
19	4	19	5
20	6	20	11
21	5	21	5
22	2	22	4
23	2	23	3
24	1	24	2
25	2	25	
27	1	26	1
30		27	4
		28	1
Sum	25		40

In chapter 5.4.3, the impact of demographic characteristics, such as age, gender and nationality, on the selection and evaluation criteria of students at state and private universities will be in a multivariate regression analysis expolored. Before this, the selection and evaluation criteria will be analysed.

Table 20. Nationality of respondents at the private university

Country of Origin	Number of Students
Germany	59
Other Nationality	6 (9.3%)

Table 20 shows that the majority of the respondents come from Germany. Just 6 students of the Bachelor programme have another nationality. Significant is the high number of German students in contrary to foreign students at the private university in Hamburg. Furthermore, compare to the University of Hamburg less foreign students study at the private university. That is suprising, because private universities try to attract students with their internationality, foreign student programmes, partner universities and exchange programmes. Possible reasons are non English-speaking professors and lecturers. English-speaking professor and lecturers (fluent speakers) are expensive and the development of English degree programmes requires much work. International students consider often rankings, accreditations or certifications to justify the quality of a private university and their degree programmes.

Private universities which offer degree programmes taught in English language, have to obtain these quality standards. However, private universities have to work hard to obtain international accreditations in form of high quality of degree programs, professors, lecturers and mentoring programmes. Therefore, the statement of the DAAD-International Programmes (2014) that private universities offer more bachelor programs taught in English language than state universities have to be relativised.

Conclusion

Chapter 5 showed the demographic structure of the respondents. It can be observed that the majority of the questioned students at state and private university are from Germany. Just a few respondents have other nationalities. Interesting is that less international students study at the private university than at the University of Hamburg. That is surprising as private universities often try to attract students with their international orientation and international university partner networks. A reason can be still the few English speaking bachelor programmes. It can be assumed that the majority of the questioned students are aged 20 and 21 as this is the age group often represented in the second semester. By breakdown the respondents into age groups it can be observed that less female students than male students answered the questionnaire at the private university. However, that should not implicate that more male student as female student study at private universities.

5.3 Discussion and Analysis

The next chapters will be divided into different statistical analysis. The first analysis is a descriptive analysis. This analysis provide insights as to the nature of the responses obtained, as reflected in the distribution of values for each variable of interests, Furthermore, provides such an analysis means for presenting the data in digestible maner, through the use of tables and graphs (Diamantopoulos and Schlegelmilch, 1997, 73; Hox, 2010).

This analysis will be followed by a bivariate correlation analysis. The method analyse two variables to point out the empirical relationship between the variables. An advantage of the bivariate correlation analysis is that low or high correlations between selection criteria can be identified. The correlation analysis will be followed by an explorative factor analysis (EFA).

The EFA is a statistical technique which helps to identify the relationship between measured variables. The technique is useful when a researcher has not a hypothesis about the impact of the measured variables and data (Backhaus et al., 2011; Hox, 2010). The last step of the statistical evaluation will be a multivariate regression analysis. The multivariate regression analysis is a statistical process to determine the relationships among variables. The focus is on the relationship between a dependent variable and one or more independent variables and how the variables correlate with each other (Stier, 1999).

5.3.1 Descriptive Analysis

In the following, the results of a cross analysis of the selection and evaluation criteria of students at the state and the private university are presented (selection phase A and C and evaluation phase B and D). This is followed by an analysis of the students' selection phase and the evaluation phase for each type of higher education institution (A and B; C and D).

Figure 11. Analysis of students' selection and evaluation criteria at the state University of Hamburg and the private university in Hamburg

Phase of Decision	State University	Private University
Selection (Selection Phase)	A	C
Evaluation (Evaluation Phase)	B	D

Analysis of selection criteria of the state or private university.

Cross analysis of the selection criteria at the state and the private University

5.3.1.1 Cross Analysis of the Selection Criteria at State and Private University

The first step is the cross analysis of students' selection criteria at the state University of Hamburg and students at the private university (Figure 11).

Table 21. Cross analysis of students at the state University of Hamburg and the private university (Selection Phase)

Selection phase								
State university				Private university				Δ t-Test
Rank	Criteria	Mean	Standard deviation	Rank	Criteria	Mean	Standard deviation	
1	Employability	3.53	1.185	1	Employability	4.14	1.060	0.61***
2	University facilities	3.35	1.031	4	University facilities	3.81	0.948	0.46***
3	Academic reputation	3.36	0.993	2	Academic reputation	3.98	0.984	0.62***
4	Links to companies	3.29	1.244	3	Links to companies	3.86	1.087	0.57***
4	Image of the university	3.29	0.999	5	Image of the university	3.69	0.865	0.40***
6	Appearance at university fairs	3.20	0.923	5	Appearance at university fairs	3.69	0.900	0.49***
7	Research reputation	3.11	0.964	9	Research reputation	3.31	0.871	0.20**
8	Ranking of the university	2.90	1.044	8	Ranking of the university	3.43	1.089	0.53***
9	Reputation of professors	2.89	1.006	7	Reputation of professors	3.51	0.970	0.62***
10	Recommendations by friends	2.85	1.205	11	Recommendations by friends	2.73	1.107	-0.12*
11	Fluctuation of staff	2.72	1.047	10	Fluctuation of staff	3.03	0.968	0.31***

* = $p < .1$; ** = $p < .01$; *** = $p < .001$

The cross analysis of students at the state University of Hamburg and at the private university reveals that the perceived employability after graduation is the most important selection criterion for both institutions (Table 21). The mean of this factor is 3.53 for the state and 4.14 for the private university. A t-test reveals that this difference is significant on a $p < .001$ -level, i.e. students at the private university regard employability as significantly more important than students at the state university. The second most important criterion is the academic reputation (mean for the state university=3.36 and for the private university=3.98), with students at private universities again putting significantly more emphasis on the criterion than those at the state university ($p < .001$). Students at the state university rank facilities third (mean=3.35) while those at the private university regard links to companies as more relevant (mean=3.86). For both types of institutions, recommendations by friends and the fluctuation of professors are ranked the lowest, however, in a different order. It is interesting that students at the private university assessed most criteria as more important than their counterparts at the state university. The only exception is recommendations by friends which is more important for state than for private university students.

Table 22. Cross analysis of students at the state University of Hamburg and the private university (Evaluation Phase)

Evaluation phase								
State university				Private university				Δ t-Test
Rank	Criteria	Mean	Standard deviation	Rank	Criteria	Mean	Standard deviation	
1	Employability	3.83	0.998	1	Employability	4.19	0.920	0.36***
2	Academic reputation	3.52	0.937	3	Academic reputation	4.00	0.992	0.48***
3	University facilities	3.50	0.904	5	University facilities	3.79	0.943	0.29**
4	Appearance at university fairs	3.50	0.853	7	Appearance at university fairs	3.62	0.864	.012**
4	Reputation of professors	3.38	0.968	4	Reputation of professors	3.89	1.010	0.51***
6	Image of the university	3.35	0.980	6	Image of the university	3.77	0.904	0.42***
7	Links to companies	3.34	1.209	2	Links to companies	4.05	0.999	0.71***
8	Ranking of the university	3.27	1.016	9	Ranking of the university	3.54	1.112	0.27**
9	Research reputation	3.15	0.903	8	Research reputation	3.56	0.889	0.41***
10	Fluctuation of staff	2.97	0.957	10	Fluctuation of staff	3.07	0.929	0.30***
11	Recommendations by friends	2.97	1.189	11	Recommendations by friends	2.61	1.063	-0.36***

* = $p < .1$; ** = $p < .01$; *** = $p < .001$

Table 22 presents the cross analysis of students' evaluation criteria, i.e. the criteria which are relevant for assessing the institution after enrollment. Again, the perceived employability after graduation is ranked first by students at both institutions (mean for the state university=3.83 and for the private university=4.19). The difference between the two groups is significant on a $p < .001$ -level. For students at state universities, the academic reputation is ranked second (mean=3.50). Students at private universities perceive links to companies as more important (mean=4.05), followed by academic reputation (mean=4.00).

The lowest relevance is ascribed again to the fluctuation of staff (mean for the state university=2.97 and for the private university=3.07) and recommendations by friends (mean for the state university=2.97 and for the private university=2.61). Again, the latter is the only factor which is significantly more relevant for students at state universities than for those at private institutions.

Summarising the results, the students' criteria employability, university facility and academic reputation are the most relevant criteria for students for selecting the state University of Hamburg. Students of the private university perceived employability, academic reputation and links to companies as the most important selection criteria. Both outcomes show similarities, however students at private universities put more emphasis on specific selection criteria. For example, employability shows a very high mean of 4.14 followed by academic reputation with a mean of 3.98. Both criteria show a significantly higher mean than for students at the state University of Hamburg.

5.3.1.2 Analysis of the Selection and Evaluation Criteria of the State and the Private University

After a cross analysis of the similarities and differences between state and private universities an analysis of the students' selection criteria at the state University of Hamburg was done. (Table 23).

Table 23. Analysis of students selection and evaluation phase (state University of Hamburg)

Selection phase			Evaluation phase			Δ t-Test
Rank	Criteria	Mean	Rank	Criteria	Mean	
1	Employability	3.53	1	Employability	3.83	0.30***
2	University facilities	3.35	3	University facilities	3.50	0.15**
3	Academic reputation	3.36	2	Academic reputation	3.52	0.16**
4	Links to companies	3.29	7	Links to companies	3.34	0.05
4	Image of the university	3.29	3	Image of the university	3.35	0.06
6	Appearance at university fairs	3.20	3	Appearance at university fairs	3.50	0.30***
7	Research reputation	3.11	9	Research reputation	3.15	0.04
8	Ranking of the university	2.90	8	Ranking of the university	3.27	0.37***
9	Reputation of professors	2.89	5	Reputation of professors	3.38	0.49***
10	Recommendations by friends	2.85	10	Recommendations by friends	2.97	0.12*
11	Fluctuation of staff	2.72	10	Fluctuation of staff	2.97	0.25**

* = $p < .1$; ** = $p < .01$; *** = $p < .001$

The analysis of the selection and evaluation phase points out that the students at the state university evaluated all selection criteria in their evaluation perspective higher than in their selection phase. In table 23, by far the highest increase can be observed for the importance of the professor's reputation ($\Delta=0.49$, $p<.001$). This is followed by the ranking of the university ($\Delta=0.37$, $p<.001$), the perceived employability and the impression of the university at university fairs (for both criteria $\Delta=0.30$, $p<.001$).

A slightly lower increase of 0.25 ($p < .01$) can be observed for the fluctuation of staff and other criteria such as the academic reputation, the university recommendation by friends, and the university facilities ($\Delta = 0.16$, $p = .01$; $\Delta = 0.12$, $p < .1$; $\Delta = 0.15$, $p < .01$). Just a small increase show criteria like the university image, the research reputation and links to companies. One explanation is maybe that students already considered these criteria as important selection variables in their decision process.

After presenting the results of students at the state University of Hamburg the focus will now be shifted to private university students. Table 24 shows the results of the analysis of the criteria in the selection and evaluation phase at the private university in Hamburg.

Table 24. Analysis of students selection and evaluation phase (private university)

Selection phase			Evaluation phase			Δ t-Test
Rank	Criteria	Mean	Rank	Criteria	Mean	
1	Employability	4.14	1	Employability	4.19	0.05
2	Academic reputation	3.98	3	Academic reputation	4.00	0.02
3	Links to companies	3.86	2	Links to companies	4.05	0.19*
4	University facilities	3.81	5	University facilities	3.79	-0.02
5	Image of the university	3.69	6	Image of the university	3.77	0.08
5	Appearance at university fairs	3.69	7	Appearance at university fairs	3.62	-0.07
7	Reputation of professors	3.51	4	Reputation of professors	3.89	0.38***
8	Ranking of the university	3.43	9	Ranking of the university	3.54	0.11
9	Research reputation	3.31	8	Research reputation	3.56	0.25**
10	Fluctuation of staff	3.03	10	Fluctuation of staff	3.07	0.04
11	Recommendations by friends	2.73	11	Recommendations by friends	2.61	-0.12*

* = $p < .1$; ** = $p < .01$; *** = $p < .001$

Overall, the analysis reveals interesting differences between state and private universities. While at the former, the relevance of all criteria increased from the selection to the evaluation phase, the analysis for the private university shows mixed results. Significant increases are observed for the reputation of professors ($\Delta = .38$, $p < .001$) and the research reputation of the institution ($\Delta = .25$, $p < .01$). On the contrary, the relevance of recommendations by friends ($\Delta = -.12$), appearance at university fairs ($\Delta = -.07$) and university facilities ($\Delta = -.02$) decreased from the selection to the evaluation phase, albeit on a non-significant level.

Another interesting result can be observed for the three highest ranked criteria employability, links to companies and academic reputation. The relevance of all criteria increased between the selection and the evaluation phase ($.02 < \Delta < .19$), however, only the increase for links to companies is significant on a $p < .1$ -level. On the contrary, the relevance of the lowest ranked

criteria fluctuation of staff and recommendations by friends remained low or even decreased further ($-.07 < \Delta < .04$).

Summarising the results, the criterion of employability is by far the most relevant for students studying at a private university in Hamburg. An interesting result can be observed for the three highest ranked criteria employability, links to companies and academic reputation. The relevance of all criteria increased between the selection and the evaluation phase ($.02 < \Delta < .19$), however, only the increase for links to companies is significant on a $p < .1$ -level. On the contrary, the relevance of the lowest ranked criteria fluctuation of staff and recommendations by friends remained low or even decreased further ($-.07 < \Delta < .04$).

5.3.1.3 Conclusion

The aim of both analysis methods was to explore the criteria that are relevant for students making their initial decision for a higher education institution and for their evaluation of this institution from their current perspective.

Generally, the perceived employability after graduation is regarded as the most important criterion at both types of institutions and at both phases. While this may have been expected for students at private universities who pay high tuition fees and expect a respective return on investment, students at state universities have often a different image. Particularly old and highly-reputed state universities stress the freedom of teaching and emphasise that the contents of teaching should not be evaluated by its applicability in practice. The latter is regarded as the domain of universities of applied science and private universities. The results contradict this view and show that also students at state universities perceive their study not as a goal in itself but a means to find a good job after graduation. Another interesting result is the relatively low relevance of research reputation and university rankings. While institutional rankings, such as the CHE University Ranking and individual rankings, such as the Handelsblatt Ranking, receive large public attention, they appear to be less relevant for students' decisions. This is remarkable since these rankings are based on quantitative and observable criteria, such as research output, amount of third-party funding and professors-students ratios, and large sample sizes (CHE, 2014; Handelsblatt, 2014). Instead, students seem to base their selection and evaluation of higher education institutions on more subjective criteria which are less observa-

ble and measurable, much as the overall university image or the appearance at university recruitment fairs.

The relatively high importance that students ascribe to university facilities is surprising. An explanation could be that students regard appealing facilities as indicators of strong links to companies that often sponsor modern equipment.

In contrast to previous studies (i.e., Heine et al., 2005), there was no support for the relevance of recommendations by friends. For students at both types of institutions it is either the least or second-least important criteria. Interestingly, it is the only criterion that is regarded as less relevant by students at private universities than by those at state institutions. One explanation for this finding may be the low number of students at private universities and the short duration of their existence in Germany, i.e. not many students have made experiences here and may talk about these to others. Moreover, private universities have generally a worse image in Germany and individuals may therefore not recommend them to their friends. Also, the analysis of the selection and evaluation criteria revealed interesting results. While for students at the state university the ranking of criteria remains stable and the relevance of all criteria increases between the two points in time, the results for students at the private university are less unified. Both the relative importance of some criteria and the direction of changes (increasing vs. decreasing) vary. Finally, the analysis of variance (ANOVA) shows that some criteria, such as research reputation or university image, are evaluated similarly within the two subgroups, i.e. the standard deviation is low. On the contrary, this is much higher for recommendations by friends and the appearance of the institution at university fairs. Thus, the evaluation of these criteria is less homogeneous within the two subgroups of state and private university students.

5.4 Statistical Analysis

5.4.1 Bivariate Correlation Analysis

After the descriptive analysis of the key variables, the next step consists of a bivariate correlation analysis. Its aim is to explore potential relationships between the various criteria that students find relevant when selecting a higher education institution. Like in the previous chapter, the focus is firstly on students at the University of Hamburg before considering students at a private university in Hamburg. Finally, both groups of students are compared.

Table 25. Bivariate correlation analysis of the selection criteria of students at the state University of Hamburg (Selection Phase)

Nr.	Selection Criteria	1	2	3	4	5	6	7	8	9	10	11
1	Image of the University	1.000										
2	Academic Reputation	.570***	1.000									
3	Research Reputation	.330**	.456***	1.000								
4	Appearance at University Fairs	.2644*	.438***	.317**	1.000							
5	Recommendations by Friends	-.002	-.005	.030	.150	1.000						
6	University Ranking	.422***	.431***	.196	.241*	.276*	1.000					
7	Reputation of Professors	.414***	.486***	.405***	.457***	.115	.372** *	1.000				
8	Fluctuation Rate	.2553*	.154	.279*	.073	.273*	.223*	.446***	1.000			
9	Employability	.245*	.366***	.339**	.187	.086	.342**	.241*	.126	1.000		
10	Links to Companies	.132	.297**	.347**	.402***	.017	.281*	.237*	.116	.504***	1.000	
11	University Facilities	.161	.164	.389***	.249*	.060	.088	.364***	.467***	.146	.413***	1.000

*=p<.05; **=p<.01; ***=p<.001

When considering the three criteria that have been revealed as most relevant in the descriptive analysis, i.e. employability, academic reputation and university facilities. Table 25 reveals a highly significant correlation between employability and links to companies ($r=.504$; $p<.001$). Links to companies are obviously seen as important determinant of employability. Likewise, a strong correlation can be observed between employability and the academic reputation of the institution ($r=.366$; $p<.001$). In contrast to private universities, however, employability also correlates strongly with the research reputation of the institution ($r=.456$; $p<.001$). It can be observed that students link a good academic reputation with a good research reputation. Obviously, students at the state university perceive a strong link between research activities and employability when they select their institute of higher education while for students of the private university this becomes evident only after they have already begun to study. This outcome is also supported by the mean of the academic reputation which is strongly and significantly related to the research reputation ($r=.456$, $p<.001$) and the position in university rank-

ings ($r=.431$, $p<.001$). This is not the fact for students at private universities. Obviously, students at the state university regard research and teaching as related and mutually supporting activities (in the tradition of Humboldt's ideal of the unity of research and teaching), while for the latter teaching quality is far more relevant and not related to research activities (at least not in the selection phase). With regard to university facilities, a strong correlation with links to companies can be observed ($r=.413$; $p<.001$). Modern university facilities are also perceived to be related to the fluctuation rate of the university staff ($r=.467$; $p<.001$). Thus, students are likely to assume that professors and academic staff prefer staying at a modern and well-equipped university or that those professors with a longer tenure put more emphasis on improving university facilities, respectively.

Table 26. Bivariate correlation analysis of the evaluation criteria of students at the state University of Hamburg (Evaluation Phase)

Nr.	Evaluation Criteria	1	2	3	4	5	6	7	8	9	10	11
1	Image of the University	1.000										
2	Academic Reputation	.516***	1.000									
3	Research Reputation	.303**	.543***	1.000								
4	Appearance at University Fairs	.396***	.194	.163	1.000							
5	Recommendations by Friends	.008	-.213	.130	.006	1.000						
6	University Ranking	.341**	.450***	.244*	.153	.113	1.000					
7	Reputation of Professors	.395***	.387***	.350**	.378**	.106	.346**	1.000				
8	Fluctuation Rate	.076	-.007	.210	.317**	.339**	.355**	.298**	1.000			
9	Employability	.254*	.283*	.307**	.335**	.073	.166	.283*	.169	1.000		
10	Links to Companies	.203	.240*	.235*	.347**	.102	.340**	.278*	.354**	.458***	1.000	
11	University Facilities	.319**	.271*	.328**	.437***	.070	.075	.381**	.236*	.284*	.247*	1.000

*= $p<.05$; **= $p<.01$; ***= $p<.001$

The results of the bivariate correlation analysis of the evaluation criteria of students at the state university of Hamburg (evaluation phase) are reported in Table 26. Like for the selection phase the most relevant criteria of the evaluation phase are employability, university links to companies and academic reputation.

One of the strongest correlations is again revealed between employability and university links to companies ($r=.458$; $p<.001$). While this is similar to students at private universities, signifi-

cant correlations can also be observed between employability and image ($r=.254$, $p<.05$), academic reputation ($r=.283$, $p<.05$), research reputation ($r=.335$, $p<.01$) and appearance at university fairs ($r=.335$, $p<.01$). Links to companies as the second most relevant evaluation criterion is more strongly related to other criteria as well, such as to academic reputation ($r=.240$, $p<.05$), research reputation ($r=.235$, $p<.05$), and reputation of professors ($r=.278$, $p<.05$). The same applies to academic reputation as the third most important criterion that shows significant correlations with research reputation ($r=.469$, $p<.001$) and the reputation of professors ($r=.387$, $p<.001$), among others.

Summarising the results, the bivariate correlation analysis of the state university students points out a highly significant correlation between employability and links to companies ($r=.504$; $p<.001$) within the student selection phase. Another correlation can be observed between employability and the academic reputation of the institution ($r=.366$; $p<.001$). The most relevant students' criteria of the evaluation phase are employability, university links to companies and academic reputation. Significant correlations can be observed between employability and university image ($r=.254$, $p<.05$), academic reputation ($r=.283$, $p<.05$) as well as appearance at university fairs ($r=.335$, $p<.01$).

Table 27. Bivariate correlation analysis of the Selection Criteria of students at a private university in Hamburg (Selection Phase)

Nr.	Selection Criteria	1	2	3	4	5	6	7	8	9	10	11
1	Image of the University	1.000										
2	Academic Reputation	.307*	1.000									
3	Research Reputation	.259*	.200	1.000								
4	Apearance at University Fairs	.463***	.423***	.263*	1.000							
5	Recommendations by Friends	.057	-.141	.055	0.107	1.000						
6	University Ranking	.260*	-.047	.251	.325*	.202	1.000					
7	Reputation of Professors	.186	.335**	.278*	.279*	-.054	.363**	1.000				
8	Fluctuation Rate	.218	.018	.264*	.284*	.277*	.238	.336**	1.000			
9	Employability	.209	.406***	-.062	.094	-.226	.090	.412***	.096	1.000		
10	Links to Companies	.255*	.312*	.099	.248	.007	.092	.279	.064	.601***	1.000	
11	University Facilities	.183	.300*	.320	.296*	.072	.158	.315*	.169	.442***	.497***	1.000

*=p< .05; **=p<.01; ***=p<.001

Table 27 shows the results of the bivariate correlation analysis of the selection criteria of students at a private university. The analysis is focused on the three most relevant selection criteria according to the descriptive analysis in chapter 5.3.1, i.e. employability, links to companies and university facilities.

The most important criterion, employability, reveals a highly positive and significant correlation with links to companies ($r=.601$, $p<.001$). Obviously students regard links to companies in the form of sponsorship, guest lecturers, and partnerships etc. as observable indicators of the more latent variable employability. Moreover, highly positive correlations of employability with university facilities ($r=.442$, $p<.001$), the academic reputation of the institution ($r=.406$, $p<.001$) and the reputation of professors ($r=.412$, $p<.001$) can be observed. A potential explanation of this finding is that modern buildings, up-to-date theatres and classrooms with modern equipment gives students the impression to be better educated and so more attractive for future employers. This resemblance of the appearance of private universities and companies gives them the impression to be well prepared for future jobs. Especially at private universities, modern facilities are often sponsored by companies and may thus be perceived as an indicator of close company relations which in turn can be regarded as basis for future jobs opportunities.

Furthermore, employability is closely linked to the academic reputation of the institution and the reputation of professors. Students assume that a high academic reputation is essential for companies to coporate with private universities. Interestingly, the research reputation of the institution shows a negative correlation with employability, albeit on a non-significant level. Obviously, students at private universities regard research activities as obstructive for employability, i.e. they may believe that professors who strive to improve their research performance have less time to engage in corporate relations which in turn impedes the students' future job opportunities.

Table 28. Bivariate correlation analysis of the evaluation criteria of students at a private university in Hamburg (Evaluation Phase)

Nr.	Evaluation Criteria	1	2	3	4	5	6	7	8	9	10	11
1	Image of the University	1.000										
2	Academic Reputation	.479***	1.000									
3	Research Reputation	.421***	.469***	1.000								
4	Appearanc at University Fairs	.345**	.324*	.354**	1.000							
5	Recommendations by Friends	.126	-.141	-.043	.129	1.000						
6	University Ranking	.379**	.031	.378**	.195	.217	1.000					
7	Reputation of Professors	.239	.354**	.432***	.398**	-.125	.197	1.000				
8	Fluctuation Rate	.260*	.176	.133	.351**	.411***	.066	.191	1.000			
9	Employability	.252	.231	.218	.169	-.248	.147	.284*	-.089	1.000		
10	Links to Companies	.208	.223	.114	.403**	-.249	.136	.112	.017	.646***	1.000	
11	University Facilities	.156	.152	.296*	.347**	-.037	.044	.093	.321*	.056	.173	1.000

*=p< .05; **=p<.01; ***=p<.001

Table 28 shows the results of the bivariate correlation analysis of the evaluation criteria of students at a private university. The anlaysis is again focused on the three most relevant selection criteria according to the descriptive analysis in chapter 5.3.1. Namely, employability, links to companies and the academic reputation.

As in the selection phase, the most important criterion, employability, reveals a highly positive and significant correlation with links to companies ($r = .646$, $p < .001$). However, students from their evaluation perspective see a less strong link between employability and the reputation of professors ($r = .284$; $p < .05$) than in the selection perspective. It can be assumed that students recognise that the reputation of professors influences their future employability only to

a lesser degree because companies either do not ask for the names of their professors or they are not familiar with their research activities. Another interesting result is the strong correlation between links to companies and appearance at university fairs ($r=.403$; $p<.01$). Students may suppose that private universities actively appear on university fairs in order to signal their strong relations to companies. While this is less relevant for the selection of a higher education institution, students at private universities perceive their appearance at university fairs as more important when they have become a member of this institution and identify themselves more strongly with it.

Table 28 shows that students perceive a strong relationship between the academic reputation and the overall image of the institution ($r=.479$; $p<.001$). Students assume that a good university image is closely linked with its academic reputation in the form of research reputation and university ranking. Another strong correlation can be seen between the academic reputation and the research reputation ($r=.469$; $p<.001$). It is interesting to see that the research reputation is much more strongly related to other selection criteria than in the selection phase. Obviously, students who have already completed some semesters at a private university regard the research reputation of their professors as more valuable than before entering this institution. One explanation may be that professors who base their courses on their own research instead of relying on others materials are perceived as more competent and more suitable to improve the image and reputation of the institution. Moreover, they may be more likely accepted by companies as partners in corporate projects. While the bivariate correlation analysis can reveal only first indications of relationships between the various selection and evaluation criteria, a more detailed analysis is needed. Therefore, an explorative factor analysis will be conducted in the next chapter.

Summarising the results, the criterion employability shows a significant correlation with links to companies ($r=.601$, $p<.001$) within the students selection phase. University partnerships in form of dual study programmes or internships can be students' indicators for that criterion. Other important correlations of private university selection criteria can be seen between employability and university facilities ($r=.442$, $p<.001$), the academic reputation of the institution ($r=.406$, $p<.001$) and the reputation of professors ($r=.412$, $p<.001$). The evaluation phase (table 28) showed that private university students perceive a strong relationship between the academic reputation and the overall image of the institution ($r=.479$; $p<.001$). Students assume that a good university image is closely linked with its academic reputation in the

form of research reputation and university ranking. Another strong correlation can be seen between the academic reputation and the research reputation ($r=.469$; $p<.001$). It is interesting to see that the criteria research reputation in the evaluation phase is strongly linked to other selection criteria than in the selection phase. Obviously, students who have already completed some semesters at a private university regard the research reputation of their professors as more valuable than before entering the institution. One explanation may be that professors who base their courses on their own research instead of relying on others materials are perceived as more competent and more suitable to improve the image and reputation of the institution. Moreover, they may be more likely accepted by companies as partners in corporate projects. While the bivariate correlation analysis can reveal only first indications of relationships between the various selection and evaluation criteria, a more detailed analysis is needed. Therefore, an explorative factor analysis will be conducted in the next chapter.

5.4.2 Explorative Factor Analysis

The next step of the data analysis is an explorative factor analysis (EFA). An EFA is recommended for market segmentation and developing differentiated marketing-mix policies for heterogeneous target groups (Backhaus et al., 2011; Kotler and Keller, 2009), which, as explained in chapter 1, is one of the key objectives of this study. The EFA reduces the catalogue of selection criteria by identifying types of students (so-called factors) who prefer different selection criteria in their selection phase and evaluation perspective of state and private universities. As in the previous chapters, the results for students at the state university of Hamburg are presented first before continuing with those of the private university.

Table 29. Explorative factor analysis (EFA): Students at the University of Hamburg (Selection Phase)

Selection Criteria	Factor 1	Factor 2	Factor 3	Factor 4
Image of the University	.843	.066	.0032	.023
Academic Reputation	.817	.048	.286	.063
Research Reputation	.404	.479	.363	.147
Appearance at University Fairs	.416	.263	.320	-.084
Recommendations by Friends	-.073	.173	-.002	-.882
Ranking of the University	.572	-.088	.288	-.535
Reputation of Professors	.615	.518	.070	-.136
Fluctuation Rate	.137	.746	-.081	-.319
Employability	.232	-.027	.788	-.110
Links to Companies	.071	.249	.864	.032
University Facilities	-.014	.842	.247	.034
<i>Explained Variance</i>	<i>2.503</i>	<i>1.941</i>	<i>1.838</i>	<i>1.231</i>

Varimax-rotation, Eigenvalues >1

Factor loadings > .700000 are in bold

With regard to the selection of the University of Hamburg (selection phase), the EFA reveals a four factor solution (Table 29). Factor 1 considers the academic reputation (fl=.817) and the image of the institution as the most relevant criteria within the selection phase. Factor 2 consists of the fluctuation rate of professors/staff (fl=.746) and the university facilities (fl=.842). Employability (fl=.788) and links to companies (fl=.864) load on factor 3, and recommendation of friends (fl=-.882) on factor 4.

Table 30. Types of students at the University of Hamburg (Selection Phase)

	Selection Criteria	Type of Students
Type 1	Image of the University and Academic Reputation	Reputation-orientated students
Type 2	Fluctuation of Staff and Universities Facilities	Study conditions-orientated students
Type 3	Employability and Links to Companies	Employability-orientated students
Type 4	Recommendations by Friends	Social context-orientated students

Table 30 shows that students of type 1 find the reputation of the institution particularly relevant. For them, the image and academic reputation of the university are the most important decision criteria. In contrary, type 2 students prefer higher education institutions with good study conditions and base their decision for a state university upon this aspect. The third type of students (factor 3) is characterised by emphasizing future employment opportunities and has a strong employability orientation. For this type of student, links to companies is the most relevant criterion for choosing a state university. Student type 4 (factor 4) is social context-orientated and finds it relevant that the institution is recommended by his or her parents, friends or teachers. The decision process of this type of students is more influenced by their social network than by personal considerations.

Table 31. Explorative Factor Analysis (EFA): Students at the University of Hamburg (Evaluation Phase)

Evaluation Criteria	Factor 1	Factor 2	Factor 3
Image of the University	.637	-.094	.358
Academic Reputation	.881	-.190	.167
Research Reputation	.718	.214	.115
Appearance at University Fairs	.091	.049	.788
Recommendations by Friends	.034	.808	-.090
Ranking of the University	.634	.377	.068
Reputation of Professors	.454	.240	.465
Fluctuation Rate	.096	.731	.359
Employability	.149	.023	.687
Links to Companies	.135	.192	.657
University Facilities	.180	-.040	.601
<i>Explained Variance</i>	<i>2.396</i>	<i>1.519</i>	<i>2.414</i>

Varimax-rotation, Eigenvalues >1

Factor loadings > .700000 are in bold

The comparison of the selection phase before entering the university with the evaluation after some month studying at the respective institution reveals significant differences (Table 31). Generally, the EFA yields a three factor solution. Factor 1 considers the academic reputation

($fl=.881$) and the research reputation ($fl=.718$) of a higher education institution as the most relevant evaluation criteria. Factor 2 consists of recommendations by friends ($fl=.808$) and fluctuation rate ($fl=.731$). The appearance at university fairs ($fl=.788$) loads on factor 3.

Table 32. Types of students at the University of Hamburg (Evaluation Phase)

	Evaluation Criteria	Type of Students
Factor 1	Image of the University and Academic Reputation	Reputation-orientated students
Factor 2	Recommendations by Friends and Fluctuation of Staff	Social context-orientated students
Factor 3	Appearance at University Fairs	Impression/marketing-orientated students

Table 32 summarises the three types of students and the corresponding evaluation criteria. Type 1 orientates the ex-post evaluation primarily on the reputation of the institution. Image and academic reputation are the most relevant evaluation criteria in the evaluation perspective. For type 2 students, recommendations of the institution by friends and a low fluctuation rate are the main evaluation criteria. Type 3 characterises students who take into consideration the appearance and impression of an institution at university fairs and other marketing activities. This type of students regards primarily the public appearance of the institution as relevant. This may include, for example, an imposing stand at university fairs, impressive brochures, posters and other information materials.

The comparison between the selection phase and evaluation perspective reveals that the two types of reputation-orientated and social context-orientated students can be identified in both phases. Thus, these two student types present an appropriate basis for market segmentation and an interesting target group for recruitment of state universities. This aspect will be further elaborated in chapter 5.4.3

After analysing different types of students at the state University of Hamburg, the focus will be shifted to the private university.

Table 33. Explorative factor analysis (EFA): Students at the private university
(Selection Phase)

Selection Criteria	Factor 1	Factor 2	Factor 3
Image of the University	.102	.078	.716
Academic Reputation	.384	-.358	.630
Research Reputation	.027	.316	.549
Appearance at University Fairs	.151	.179	.750
Recommendations by Friends	-.053	.718	-.101
Ranking of the University	.138	.614	.286
Reputation of Professors	.471	.221	.379
Fluctuation Rate	.072	.620	.277
Employability	.872	-.161	.051
Links to Companies	.813	.018	.107
University Facilities	.718	.209	.159
Explained Variance	2.365	1.661	2.126

Varimax-rotation, Eigenvalues >1

Factor loadings > .700000 are in bold

With regard to the selection phase, the EFA reveals again a three factor solution (Table 33). Factor 1 considers employability (fl=.872), links to companies (fl=.813) and university facilities (fl=.718) as the most relevant selection criteria. Factor 2 contains recommendation by friends (fl=.718), and factor 3 the image of the university (fl=.716) and its appearance at university fairs (fl=.750).

Table 34. Types of students at the private university (Selection Phase)

	Selection Criteria	Type of Students
Factor 1	Employability, Company Links, University Facilities	Employability-orientated students
Factor 2	Recommendations by Friends	Social context-orientated students
Factor 3	Image of the University and Appearance at University fairs	Image and marketing-orientated students

Table 34 shows the three types of students and the respective selection criteria. Type 1 students are employability-orientated and prefer to study at a private university because of strong company links. Type 2 students are social context-orientated and base their decision on recommendations of friends. Type 3 focuses on higher education institutions with a good image. For this type of students, the image of the institution and its impression at university fairs are particularly relevant.

Table 35. Explorative factor analysis (EFA): Students at the private university (Evaluation Phase)

Evaluation Criteria	Factor 1	Factor 2	Factor 3	Factor 4
Image of the University	0.544	0.278	0.106	0.518
Academic Reputation	0.627	0.256	0.240	-0.049
Research Reputation	0.768	0.054	0.108	0.131
Appearance at University Fairs	0.377	0.309	0.589	0.184
Recommendations by Friends	-0.269	-0.288	0.363	0.705
Ranking of the University	0.292	0.206	-0.122	0.760
Reputation of Professors	0.766	0.031	0.025	0.043
Fluctuation Rate	0.084	-0.257	0.717	0.250
Employabilty	0.219	0.799	-0.096	0.071
Links to Companies	0.052	0.908	0.204	0.022
University Facilities	0.100	0.185	0.731	-0.166
Explained Variance	2.234	1.930	1.675	1.494

Varimax-rotation, Eigenvalues >1

Factor loadings > .700000 are in bold

In a final step, an EFA of the evaluation criteria of students at the private university is conducted which reveals four distinct factors. Factor 1 points out those students from their evaluation perspective find it relevant that the private university has a high research reputation and reputation of professors. Factor 2 consists of links to companies and employability after graduation. The fluctuation rate of the staff (ml=0.717) and university facilities (ml=0.731) load on factor 3. The last factor contains recommendations by friends (ml= 0.705) and rankings (ml=0.760).

Table 36. Types of students at the private university (Evaluation Phase)

	Evaluation Criteria	Type of Students
Factor 1	Research Reputation and Reputation of Professors	Reputation-orientated students
Factor 2	Links to companies and Employabilty	Employabilty-orientated students
Factor 3	University Facilities and Fluctuation Rate	Facility-orientated students
Factor 4	Ranking and Recommendations by Friends	Ranking-orientated students

Table 36 summarises the four different groups of students with regard to the evaluation of the private university. Type 1 students orientate the decision for an institution on reputational aspects. This type of students finds it important that a private university has a good research reputation and that noted professors teach the students. Type 2 is an employment-orientated student who prefers universities with strong company links. This type is primarily interested in

future employment opportunities. Type 3 is a facility-orientated student who finds it relevant that the university has good and modern facilities. Furthermore, this type of students prefers a private university with a low fluctuation rate of staff members, lecturers and professors. Supporting results of the correlation analysis (chapter 5.4.1), the EFA reveals that both criteria are connected and that modern facility may reduce the fluctuation rate of lecturers and professors. Type 4 can be characterised as ranking- and social context-orientated. This type of students considers university rankings but also recommendations of friends as relevant. Obviously, type 4 students are strongly influenced by their peer groups and find their opinions more important than their own experiences with the respective institution.

The comparison of selection types of students at state and private universities reveals that social context-orientated students can be identified at both types of higher education institutions in the selection phase and evaluation perspective (Table 37). For this type of students, recommendations by friends and the ranking of the institution are the most relevant criteria. These two criteria are relatively stable, i.e. they are prevalent in the selection phase as well as after entering the institution.

The second most relevant type is reputation-orientated students. This type can be found at state universities in both phases while it is relevant at private universities in the evaluation perspective, only. Obviously, students at private universities regard the academic reputation of the institution and the research reputation of its professors only important after they began to study here. One explanation of this finding may be that private universities in Germany - in contrast to state universities - typically have a lower academic reputation and do not communicate this in their strategy.

Instead, strong links to companies and modern facilities are often emphasised (chapter 2). For some students of private universities, however, who compare themselves with students at state universities, this criterion may become relevant during the course of study. Therefore, the academic reputation should be considered in the strategy to keep students at private universities. Similarly relevant is the type of employability-orientated students. It can be identified at private universities in both phases and at state universities in the selection phase. The relevance of this student type for private universities can be explained by their strong focus on practical knowledge and links to companies, as explained in chapter 2.1.1. Thus, they obviously attract students who regard future employment opportunities as particularly important.

The other identified types of students are relevant in one or two situations only, and no systematic patterns can be observed. They will therefore not be considered for further analysis.

Summarising the results

Table 37. Comparison of student types at the state University of Hamburg and the private university in Hamburg

Type of Students	State University		Private University	
	Selection Phase	Evaluation Phase	Selection Phase	Evaluation Phase
Reputation-orientated students	X	X	-	X
Study conditions and facility-orientated students	X	-	-	X
Employability-orientated students	X	-	X	X
Social context-orientated students	X	X	X	X
Impression/marketing-orientated students	-	X	X	-
Ranking-orientated students	-	-	-	X

Table 37 points out which type of student appears often in the different phase of both types of universities. It is interesting to observe that the reputation-orientated student just appears in the evaluation phase at the private university. That is surprising, because the importance of a good university image is assumed with private university students in Germany. On the contrary, the employability-orientated student type can be observed in both phases at the private university. Selection criteria such as links to companies and the general employability quota of alumni are very important for private university business students. The social-context orientated student can be observed in all phases. Therefore, students find it important that parents or friends recommend the private university.

5.4.3 Multivariate Regression Analysis

The final step of the data analysis is a multivariate regression analysis. This is aimed to explore whether the selection and evaluation criteria of students at the state University of Hamburg and the private university are influenced by the students' demographic characteristics, such as age, sex, marks at school, and family background. Before this is computed, a test of multicollinearity is required. The identification and exclusion of highly intercorrelated varia-

bles is necessary in order to increase the reliability of the subsequent regression analysis (Backhaus et al., 2011).

Table 38. Test of multicollinearity

Nr.	Dependent Variables	1	2	3	4	5	6	7	8
1	Age	1.00							
2	Sex (male=0, female=1)	-0.284	1.00						
3	A-Level	-0.027	0.112	1.00					
4	Academic background Parents (no=0, yes=1)	0.088	-0.164	-0.095	1.00				
5	City size	0.278**	-0.094	-0.019	0.194	1.00			
6	Type of school (private=0, state=1)	0.274**	-0.113	-0.055	0.181	0.996***	1.00		
7	Siblings studied at private university (no=0, yes=1)	0.165	0.012	0.102	-0.101	-0.027	-0.035	1.00	
8	Work experience (no=0, yes=1)	-0.204	0.045	-0.005	0.136	0.089	0.075	-0.153	1.00

*=p<.1; **=p<.01; ***=p<.001

The test of multicollinearity (Table 38) shows an extremely high correlation between the type of school where the students went to school (state and private) and the size of the city where the students lived ($p=.0996$), i.e. nearly all students who went to a private school live in cities with more than 1 million inhabitants.

Because of this very high intercorrelation the latter variable is excluded from further analysis. Moreover, the author excluded work experience as this has no significant relationship with any of the three identified student types.

As in the previous chapters, firstly the results for students at state universities are described before continuing with those at private universities. Moreover, the analysis is reduced to the three types of students that revealed to be particularly relevant in the EFA in chapter 5.4.2, namely social context-orientated, reputation-orientated and employability-orientated students.

Table 39. Multivariate regression analysis: Students at the University of Hamburg
(Selection Phase)

	Dependent Variables		
	Reputation-orientated students	Employability-orientated students	Social context-orientated students
Independent Variables			
Age	-.090	-.280**	-.220
Sex (male=0, female=1)	.020	.126	.129
A-Level	-.080	.007	.195
Academic Background Parents (no=0, yes=1)	.043	.195	-.080
Type of School (private=0, public=1)	.048	-.070	.053
Siblings studied at Private University (no=0, yes=1)	-.120	-.190	.050
R ²	.043	.141	.108
adj.R ²	.000	.064	.028
F-Value	.502	1.845**	1.359

*=p<.1; **=p<.01; ***=p<.001

Table 39 shows the results of the multivariate regression analysis for the sub-sample of the students at the University of Hamburg (selection phase). The first model with reputation-orientated students as dependent variable is not significant and has no explanatory power (adj. R²=0.000). Moreover, none of the independent variables shows significant regression coefficients. Thus, this type of students can not be explained by the analysed demographic characteristics.

With regard to employability-orientated students, the regression analysis shows a modest explanatory value (adj. R²=0.064). The model is statistically significant on a p<.01-level. Among the independent variables, only the age of students has a significant effect, however on a high level (p<.01). The older the students, the less pronounced is their employability orientation. This result may be explained by the aspect that older students focus more on the study programme rather than a possible future employment. For example, interesting courses, elective study modules where students can specialise their education or the bachelor thesis may be more relevant for older students than in this moment job perspectives.

The last model with social context-orientated students as dependent variable is significant on a $p < .1$ level and has a lower explanatory power (adj. $R^2 = .028$). None of the independent variables shows a significant regression coefficient.

Table 40. Multivariate regression analysis: Students at the University of Hamburg (Evaluation Phase)

	Dependent Variables	
	Reputation-orientated students	Social context-orientated students
Independent Variables		
Age	.069	-.290**
Sex (male=0, female=1)	.059	.092
A-Level	-.110	.286**
Academic Background Parents (no=0, yes=1)	.103	-.140
Type of School (private=0, public=1)	.022	-.040
Siblings studied at Private University (no=0, yes=1)	-.040	-.030
R^2	.053	.142
adj. R^2	-.000	.066
F-Value	.631	1.871**

*= $p < .1$; **= $p < .01$; ***= $p < .001$

Table 40 shows the results of the multivariate regression analysis for the sub-sample of the students at the University of Hamburg (evaluation phase). The first model with reputation-orientated students as dependent variable is not significant and has no explanatory power (adj. $R^2 = -.000$). Moreover, none of the independent variables shows significant regression coefficients. Thus, this type of students can not be explained by the analysed demographic characteristics. With regard to social context-orientated students, the regression analysis shows a modest explanatory value (adj. $R^2 = .066$). The model is statistically significant on a $p < .01$ -level. Among the independent variables, the age of students and the A-level have a significant effect on a high level ($p < .01$). The older the students, the less relevant are social-context orientated variables such as recommendations by friends or parents. This result may be explained by the fact that older students have a more independent and objective opinion. Older students, may have completed an apprenticeship before their study, know more about possible career pathways, are more experienced and may therefore chose their university and course of study more purposefully. On the contrary, younger individuals are likely to be more orientated towards their social network. In addition, the lower the A-level grade of the students is, the

more important are recommendations by friends and the ranking of the institution. A reason for such a behavior may be a low self-esteem of weak pupils. In this context, the social environment of the student has a high influence on the decision for a state university.

Summarising the results, the employability-orientated student type shows that the age of students has a significant effect on a high level ($p < .01$) at the University of Hamburg. The older the students, the less pronounced is their employability orientation. This result may be explained by the aspect that older students focus more on the study programme for example on elective modules or the specific topic of their bachelor thesis rather than a possible future employment. On the contrary, that implicates that younger students are more employability orientated in their selection phase. In the evaluation phase the social-context orientated type of student demonstrates a significant effect on age and A-level. The older the student the less relevant are social-context orientated criteria. However, that implicates younger students are more social-context orientated. It is interesting to observe that students who have a weak A-level are more social-context orientated and would consider in their retrospective choice more aspects such as recommendation by friends and rankings of the institution.

Table 41. Multivariate regression analysis: Students of the private university
(Selection Phase)

	Dependent Variables	
	Employability-orientated students	Social context-orientated students
Independent Variables		
Age	.053	-.230**
Sex (male=0, female=1)	.193	-.120
A-Level	-.180**	-.140
Academic Background Parents (no=0, yes=1)	.111	-.100
Type of School (private=0, public=1)	-.350**	-.120
Siblings studied at Private University (no=0, yes=1)	-.050	.0240
R ²	.178	.106
adj.R ²	.115	.036
F-Value	2.786**	1.516

*= $p < .1$; **= $p < .01$; ***= $p < .001$

Table 41 shows the results of the multivariate regression analysis for the sub-sample of the students at the private university (selection phase). With regard to employability-orientated

students, the regression analysis show a modest explanatory value (adj. $R^2=.115$). The model is statistically significant on a $p<.01$ -level. Among the independent variables, gender, A-level marks and the type of school show significant regression coefficients on a $p<.01$ -level. With regard to gender, female students are significantly more employability-orientated than male students. Moreover, students who have a weak A-level are more employability-orientated than students with better A-level marks. An explanation for this finding could be that weak A-level students assume that there are better job chances by studying at a private university. Often students expect closer links to companies, a more active alumni network as well as more support at a private university and therefore a better employability after graduation. Moreover, private universities put less emphasis on the A-level marks of applicants but also consider students' motivation letters, application interviews, etc. (Chapter 2.1.2).

This may lead students with poor marks to perceive better opportunities at private universities compared to state universities where the A-level shows no significant coefficient. Finally, students who received their A-level at a private school are significantly more employment orientated than those from a public school ($p<.01$). Relating to social context-orientated students, the regression analysis shows a low explanatory value (adj. $R^2=.036$). The model is statistically significant on a $p<.01$ -level. Among the independent variables, only the age of students has a significant effect, however on a high level ($p<.01$). The older the student, the less relevant are recommendations by friends or parents. As in the case of state universities where a similar result is revealed, this result may be explained by the fact that older students have a more independent and objective opinion about private universities. For younger students, on the contrary, recommendation by friends is more important. Having less experience with universities, they often do not have strong preferences about what and where to study and which other institution offer similar degree programmes. Their decision process is often guided by parents and friends who, for example, already study at this institution or have a positive image of it.

Table 42. Multivariate regression analysis: Students of the private university
(Evaluation Phase)

Dependant Variables			
	Reputation-orientated students	Employability-orientated students	Social context-orientated students
Independent Variables			
Age	-.150	-.110	-.140
Sex (male=0, female=1)	-.100	.110	-.230**
A-Level	-.140	-.050	-.190
Academic Background Parents (no=0, yes=1)	-.100	.066	-.180
Type of School (private=0, state=1)	1.320	-.430**	-.240
Siblings studied at Private University (no=0, yes=1)	-.270**	-.200**	.023
R ²	.187	.305	.106
adj.R ²	.123	.250	.036
F-Value	2.915	5.572	1.508

*=p<.1; **=p<.01; ***=p<.001

Table 42 shows the results of the multivariate regression analysis for the sub-sample of the students at the private university (evaluation perspective). The first model with reputation-orientated students as dependent variable is statistically significant with the independent variable siblings studied at a private university ($p<.01$). The fewer siblings studied at a private university the more important is the reputation (image and academic reputation) of the private university. A possible reason could be that siblings who studied at a private university recommend other aspects than image of the institution to their siblings. Examples can be a good mentoring programme, internships, partner universities, academic courses etc.. On the contrary, students who do not have siblings studied at a private university prefer the current image and academic reputation of the institution as indicator. Image and academic reputation can be found in university rankings, by conversations with current students, and alumni. Furthermore, financial support of companies (dual study) can be an indicator for a good image of the university. It may be assumed that companies choose a private university with a good image and a good academic reputation as a partner (dual study programme). Also well known professors or managers, who are guest lecturers, can be indicators for a positive image and a good academic reputation of a private institution. Moreover, none of the other independent

variables shows significant regression coefficients. Thus, this type of students can not be explained by the analysed demographic characteristics.

The second model of employability-orientated students show a significant correlation with the independent variable type of school ($p < .01$). The significant correlation can be observed between the type of school and the employability-orientation of the students. It may be assumed that the fewer students went to a private school the more important is the employability orientation of the students at a private university. One possible reason might be that students who did not study at a private school are more concerned about the amount of tuition fees to pay and the aspect of refinance their study. Students who studied at a private school are familiar with the aspect that parents pay school fees and because of that also the tuition fees later. Such type of student does not often think about how to finance the study and to get a good job later to refinance the tuition fees. Furthermore, the model points out that the fewer siblings studied at a private university the more important is the employability-orientation of the students. Possible causes might be a lack of experiences about the private university and the recognition of the university degrees in the business and academic world. It may be assumed that students and parents ask what they get for the tuition fee.

The third model underlines a significant correlation between social context-orientated students and the gender of students. Male students are more social-context orientated than female students in the evaluation perspective of a private university. It may be assumed that male students, from their evaluation perspective, find it important that parents or friends recommend or support their decision.

Summarising the results, the selection phase pointed out that two types of students correlate significantly with different demographic criteria. Students who have a weak A-level are more employability-orientated than students with better graduation. Furthermore, students from a private school are significantly more employment-orientated than those from a public school. The social-context orientated student type demonstrated a significant effect with gender and indicated those male students are more concerned about this topic.

The evaluation phase demonstrated significant demographic effects by all three types of students. The reputation-orientated type pointed out that the fewer siblings studied at a private university the more important is the reputation (image and academic reputation) of the private university for this type of student. The employability-orientated student type showed signifi-

cant effects with the demographic criteria type of school and siblings studied at a private university. Furthermore, table 42 pointed out that the fewer siblings studied at a private university or went to private school the more important is their employability-orientation. The last type the social-context orientated student showed a significant correlation with gender. Male students take more into account the university recommendations by friends and parents than female students.

5.5 Conclusion

Chapter 5 considered the analysis of the research findings. Different statistical methods have been applied to identify the most important students' selection and evaluation criteria for the state University of Hamburg and the private University in Hamburg. However, the focus of this thesis is to find out about students expectations and experiences at private universities. Therefore, it is important to point out that the students' selection criteria employability, academic reputation, links to companies and university facilities have been the most relevant criteria within their decision process for the private university (Chapter 5.3.1). Furthermore, the study identified three types of students who regard different selection criteria as relevant when deciding about the private university (Chapter 5.4.2). These types of students are also influenced by demographic criteria which have been analysed in chapter 5.4.3.

Types of students selecting the private University (decision making process)

1. Employability-orientated students
2. Social context-orientated students
3. Image and marketing-orientated students

Furthermore, the evaluation perspective of the students' selection criteria highlighted a different result at the private university. The analysis indicated four types of students.

1. Reputation-orientated students
2. Employability-orientated students
3. Facility-orientated students
4. Ranking-orientated students

6. The Institutional Perspective: A Qualitative Study of its Expert Interviews

6.1 Expert Interviews

The expert interview as a qualitative method is characterised by collecting and analysing comprehensive data for example about variables of choosing a business school and student recruitment. Interviews can be carried out in structured interviews, semi-structured interviews and unstructured and in-depth interviews. Structured interviews are often closely related on the basis of questionnaires. Most of the respondents will be firstly provided with some of the questions (Saunders et al., 2012). Furthermore, the researcher will read out exactly the questions. A negative aspect is that structured and also semi-structured interviews often concentrate just on the questions. That implicates that the respondent answers the questions and will lead in a specific direction. Such a guiding hinders the respondents to tell about their thinking of the research topic.

The structured interview form is standardised, gives often hardly any space for other opinions, thinking etc. and is much administered (Saunders et al., 2012). By contrast, non-standardised interviews can be separated in semi-structured and in-depth interviews (unstructured interviews). Both interview strategies can be separated into one to one and one to many interviews. One to one interviews are face to face interviews, telephone interviews and via internet. One too many interviews are group interviews and electronic group interviews. Unstructured interviews equal if they are characterised by one to one or one too many forms, such an interview technique is firstly informal (Saunders et. al., 2012).

The interview form is characterised by no list of questions. The researcher explores more in depth about the topic and gives so the respondent the chance to answer freely about their opinions and their relation to the topic. Important is that the selection of the respondent guides the researcher through the interview. Such a form of an interview is called non-directive (informant interview) (Saunders et al., 2012). Researchers, who would like to get a broader inside in the research topic, have to use the technique of focused in depth interviews. Such a technique allows the researcher to respond on the interviewee answers (Saunders et al., 2012, 375). The PhD thesis is built on the basis of descriptive studies and as well exploratory studies. The question for the researcher will be which interview strategy would be the best possible for the PhD thesis. A possible research structure for an exploratory but as well descriptive study is the semi structured interviewee method. Saunders et al. (2012: 377) pointed out that

“in a descriptive study, structured interviews can be used in as means to identify general patterns and in an exploratory study, semi structured interviews may be used in order to understand the relationship between variables, such as those revealed from a descriptive study”. Especially, the understanding of relationships between variables is an important aspect of choosing a semi structured interview form with a quantitative questionnaire. To find out about students wants and needs of a Business School, their expectations and experiences are significant aspects for an economically sustainable business school. The relationship between variables which influence the decision process of a business school combined with personal and demographic aspects can help to target specific focus groups for an institution. This study is characterised by semi structured interviews carried out with experts of the higher education sector which helps to analyse and explain relationships between student variables about their decision process (Appendix 4). The following summaries of the evaluations of the semi-structured interviews with three experts are based on the transcriptions (Appendix 5-7)

6.1.1 Evaluation of the Interview of Dr. Lobin (Appendix 5)

Dr. Lobin was employed for a long time at a private business school in Dortmund. She worked as Head of Marketing and Communication and was closely linked with the student recruitment center.

Summary of the most important aspects of the interview

Dr. Lobin pointed out that most of the students have chosen a private university because of a better employability after their graduation. The students have seen better job chances through the university network. Another important selection criterion for students at a private university is the difference of student numbers between state and private institution. State universities are often characterised by overcrowded lectures. In contrary, private universities offer smaller classes with better mentoring. Private universities offer often a large number of partner universities worldwide. Next to the aspect of better education by small classes, Dr. Lobin mentioned that other selection criteria are university links to companies and a better practical experience for students at a private university.

Dr. Lobin pointed out that a relevant selection criterion is the university image. She underlined that image and the alumni programme strongly affected each other. Academic staff in-

fluences the image positively or negatively. Another significant aspect is the academic reputation of a private university. Especially the reputations of the professors influence the decision process of students and influence the academic reputation positive or negative. Another significant decision criterion for or against a private university is the employability after graduation. Students and their parents expect for their investment on tuition fees an outcome in form of a high employability after graduation. Because of that, are university links and a strong alumni network an important aspect to improve the employability of graduates.

Furthermore, Dr. Lobin affirms that private universities have to use university fairs to gain a good image. University fairs are strong instruments to sharpen the public image. The selection criterion university recommendation by friends plays a minor role. Maybe the recommendation of an institution by friends of their parents, by siblings or alumni plays a larger role than expected. In addition, plays the fluctuation of academic staff a minor role for students at private universities. It is more important that new staff with the same knowledge and teaching qualities fill the gap.

Dr. Lobin underlined that female students decide to study degree programmes such as tourism management and male students prefer subjects such as finance and business. The social background plays a role but not as is often assumed. The students are often characterised by different social backgrounds. Workers sent their children to private universities as well. The previous school type plays a minor role. A negative aspect was highlighted by Dr. Lobin. She pointed out that most of the undergraduate programmes are taught in German language and because of that to recruiting foreign students is difficult. On the other hand, private universities offer a wide range of postgraduate programmes which are almost or full taught in English language. Dr. Lobin pointed out that students have to look for the university accreditations such as the German Council of Science and Humanities (Wissenschaftsrat) or accreditation programmes such as the FIBAA. Both certifications are indicators for a good business school. To recruit students to private universities, the institutions have to find out about the relevant target groups and programme trends. Brochures and university fairs are still relevant marketing instruments. Private universities have to illustrate seriously interested students their possible career pathways and the internationality of the institution. It is interesting is that Dr. Lobin sees social media marketing activities as less important.

Table 43. Results of the interview with Dr. Lobin

Important criteria for students decision process for a private university	Which type of student studies at a private University	What identifies a good private university?	Which instruments are important	Improvements
Employability after graduation/network	Social background plays a role/ but workers sent their children as well to private universities	German Council of Science and Humanities (Wissenschaftsrat) or accreditation programmes such as the FIBAA.	University fairs	Dr. Lobin requires more bachelor programmes in English language
More practical experiences through university links to companies	Acquisition of foreign students is difficult (Bachelor programmes in German language)	How professors, lecturers and staff speak about the institution	Brochures and university fairs are still relevant marketing instruments	More international programmes
Overcrowded lectures at state universities/better facilities at private universities	Male students prefer economic and business programmes/female students hospitality and tourism programmes (ISM university)	How human resource manager of companies consider and evaluate a private university	Social media marketing activities are less important.	
Academic reputation of professors	Previous school (state or private) type plays a minor role	Evaluation of the degree programmes	Correct identification of target groups	
Small classes and better mentoring at a private university	Willingness to pay for good education increased in all social backgrounds	Evaluation of staff	Show interested students possible career pathway	
Wider range of semester abroad programmes			Test weeks	
University image			Open days activities with information by alumni	
Alumni network				
Parents and students expect an outcome for their financial investment				

6.1.2 Evaluation of the Interview of Prof. Dr. Holtbrügge (Appendix 6)

Professor Dr. Dirk Holtbrügge is Professor of International Management (Head of Department) at the School of Business and Economics, Friedrich-Alexander-University of Erlangen-Nürnberg (state university), Germany. He received his doctorate and his habilitation from the University of Dortmund, Germany. He was offered chairs at the Technical University of Hamburg (2010), AKAD Wissenschaftliche Hochschule Lahr (2000), RWTH Aachen (2000), and ESCP-EAP European School of Management Berlin (2000). He was a visiting professor at the State University St. Petersburg and occasionally holds lectures at universities in China, India and Russia (FAU, 2014)

Summary of the most important aspects of the interview

Prof. Dr. Holtbrügge points out that the most important criterion for students is the location of the university. The majority of students want to study next to their home. However, the study will find out about students expectations and experiences and therefore concentrate not on the criterion location of the university. Some students make the decision for a university because of a ranking. The last group has to accept the offer of any university because of their weak A-level. Prof. Holtbrügge mentioned that there are no clear criteria for a good or weak university. He points out that .i.e. university rankings are a non-valid indicator for the student decision process. He underlined that rankings have to be seen very critical because they often depending on the academic and research engagement and the opinion of academic staff. A better approach would be to ask students and they have to evaluate the institution. One of the most relevant criterion for students is the aspect of employability after graduation. Prof. Dr. Holtbrügge pointed out that his own university established a hall of fame of alumni. To highlight the corporations and links with companies will help to increase the employability of students after graduation. Prof. Dr. Holtbrügge underlined that the most important selection criteria for students at a private university are the condition and acceptance of admission. Low entry barriers allow weak A-Level students to start a university degree programme. On the other side, some private universities recognised that the image and the quality of students are very important aspects for a private university. Because of that, some private universities improved their entry barriers. A negative aspect of private universities is the fluctuation rate of academic staff. State universities often offer better wages and financial safety. Prof. Dr. Holtbrügge mentioned that students who did not pass the entry barriers of state universities apply at pri-

vate universities. Other reasons are small classes and the impression of better mentoring. Furthermore, students who have problems to organise themselves choose often private universities. He underlined that most of students are from wealthy families at private universities. Prof. Dr. Holtbrügge reminds that a good private university is not characterised by their promises to students. The academic quality, competent staffs, evaluations of students and accreditation are other relevant indicators. Important to mention is the relevance of fun at a private university. Because of closer mentoring, smaller classes and often more excursion students get the impression of more fun at a private university. To recruit students to a private university by open days, visits and lectures at schools are a strong marketing instrument. However, it is difficult to get access to public schools in Germany. A negative image can be observed by private universities which often advertise their programmes on buses, subways or trains. A university degree is still seen as an elitist privilege.

Table 44. Results of the interview with Prof. Dr. Holtbrügge

Important criteria for students decision process for a private university	Which type of student studies at a private University	What identify a good private university?	Which instruments are important to recruit and retain students	Improvements at private universities
University image	Students with a weak A-level	Evaluations of current students of the university	Inform interested students about degree programmes and job perspectives	Fluctuation rate of academic staff
Location of the university	Students from wealthy families	Rankings are a non-valid indicator!		Better financial safety
Rankings (they have to be seen critical)	Students who not passed state university entry barriers	Which concentrates on the criterion employability of their students	Open days	More international accreditations
Employability		Links and partnerships to companies	Employability as marketing instrument (hall of fame)	Recruit more international students
University links to companies		Fun (good atmosphere) within university time	Good academic programme, good lecturers and showing possible career pathways support to keep students	More english speaking bachelor programmes
Conditions of admission		High service Quality		
Modern facilities		Accreditations are requirements!		
Mentoring of professors				
High number of excursion				

6.1.3 Evaluation of the Interview of Prof. Dr. Berg (Appendix 7)

Prof. Dr. Nicola Berg joined the University of Hamburg in December 2008 and holds the Chair of the Department of Strategic Management. She has a post-doctoral degree (Habilitation) and a doctoral degree from the Technical University of Dortmund. Her research interests include international management, intercultural management, human resource management, and public affairs management. She has published several articles in journals such as *International Business Review*, *Journal of Business Ethics*, *Management International Review*, *Journal of East European Management Studies*, among others. Several research trips to China, France, India, Russia, the US, etc. (Universität Hamburg, 2014).

Summary of the most important aspects of the interview

Professor Berg underlined that the most important criterion for students is the aspect to be close to their parents' home. Examples are the overcrowded universities in West Germany and the less crowded in East Germany. However, the study will find out about students expectations and experiences and therefore concentrate not on the criterion location of the university. Other relevant decision indicators are a strong reputation of a private university, university rankings and the general image of the institution. Good advertising i.e. through promotional material (glossy brochures) supports the decision process. However, Professor Berg pointed out that image plays a more important role for private universities than at state universities. University fairs are relevant image platforms for private universities. Furthermore, are for bachelor students' criteria such as academic and research reputation rather insignificant. The increasing importance of international comparisons and rankings are getting more and more relevant for private universities. In addition, the criterion employability is another important factor for private universities. German state universities have not such a strong focus on alumni networks and employability aspects. In contrary, state universities are not commercialising the topic employability such as private universities. Professor Berg highlighted that university links to companies and the employability after graduation have to be more pointed out by state universities. Private universities use these criteria much more effective. Success factors for private universities are their alumni. To use them for advertisement campaigns supports the recruitment of students. Furthermore, students find the facilities better at private universities. Also, private universities create the impression of more internationality. Well known international and domestic accreditations emphasise the quality of private universities.

However, most of the students are not used to accreditation systems and their requirements. Therefore it is difficult for students to use those accreditations systems for their decision process. Universities have to make the certification more transparent and to highlight the importance as well as the advantages of the accreditation. A problem is the high fluctuation rate of academic staff at private universities and therefore the associated bad atmosphere at the institution. These aspects give private universities a negative image. On the contrary, are mentoring programmes, better advertising campaigns and better service arguments arguments to choose a private university.

Table 45. Results of the interview with Prof. Dr.Berg

Important criteria for students decision process for a private university	Which type of student studies at a private University	What identify a good private university?	Which instruments are important to recruit students	Improvements at private universities
Location of the university	Background: wealthy families	Career pathways of alumni	Rankings are a relevant marketing instrument	Improvement of a high fluctuation of academic staff
University reputation for single degree programmes		Good national and international accreditations, strong university links to companies and a strong network of partner universities world wide.	Glossy brochures and good advertising campaigns	Problem: some students expect a high employability without good grades or personal engagement at a private university
University as a status symbol			Appearance at university fairs	Minimise the differences between expectations and experiences
Employability				
Reputation of professors				
close links to companies/network				

The next step comprised a listing of important and less important selection variables about choosing a private or state university. Table 46 presents relevant selection criteria from the point of view of the experts.

6.2 Conclusion

Table 46. Addressed selection criteria by the experts, subdivided in very important, important and less important students' criteria for private university

	Selection Ctiteria	very important	important	less important
Dr. Lobin	Network of private universities	X		
	Employabilty/links to companies	X		
	Alumni network	X		
	Small classes/good facilities	X		
	Social background			X
	Academic repuationation of professors	X		
	demonstrate the return on investement by paying tuition fees	X	X	
	Test study/in house activities/open days		X	
	Social media			X
	Appearance at university fairs	X		
Prof.Dr. Holtbrügge	Modern facilities	X		
	Employabilty/links to companies	X		
	Mentoring of professors		X	
	Slight fluctuation rate of staff	X	X	
	Academic quality/Image	X		
	Career pathways (career center)		X	
	Ranking of the private or state University		X	
	School visits/open days		X	
	University advertisement on buses/print media			X
Prof. Dr. Berg	Image of the the private university	X		
	Reputation of professors	X		
	Academic and research reputation	X		
	Ranking of the private university	X		
	Employabilty/links to companies	X		
	University fairs		X	
	Universities facilities		X	
	Glossy brochures		X	
	Slight fluctuation rate of staff	X		
	Advertisment in print media etc.		X	

7. Conceptual Student Recruitment and Marketing Model for German Private Universities

Based on the research findings of (chapter 5), the following conceptual model has been developed.

Figure 12. Conceptual recruitment and marketing model for private universities in Germany

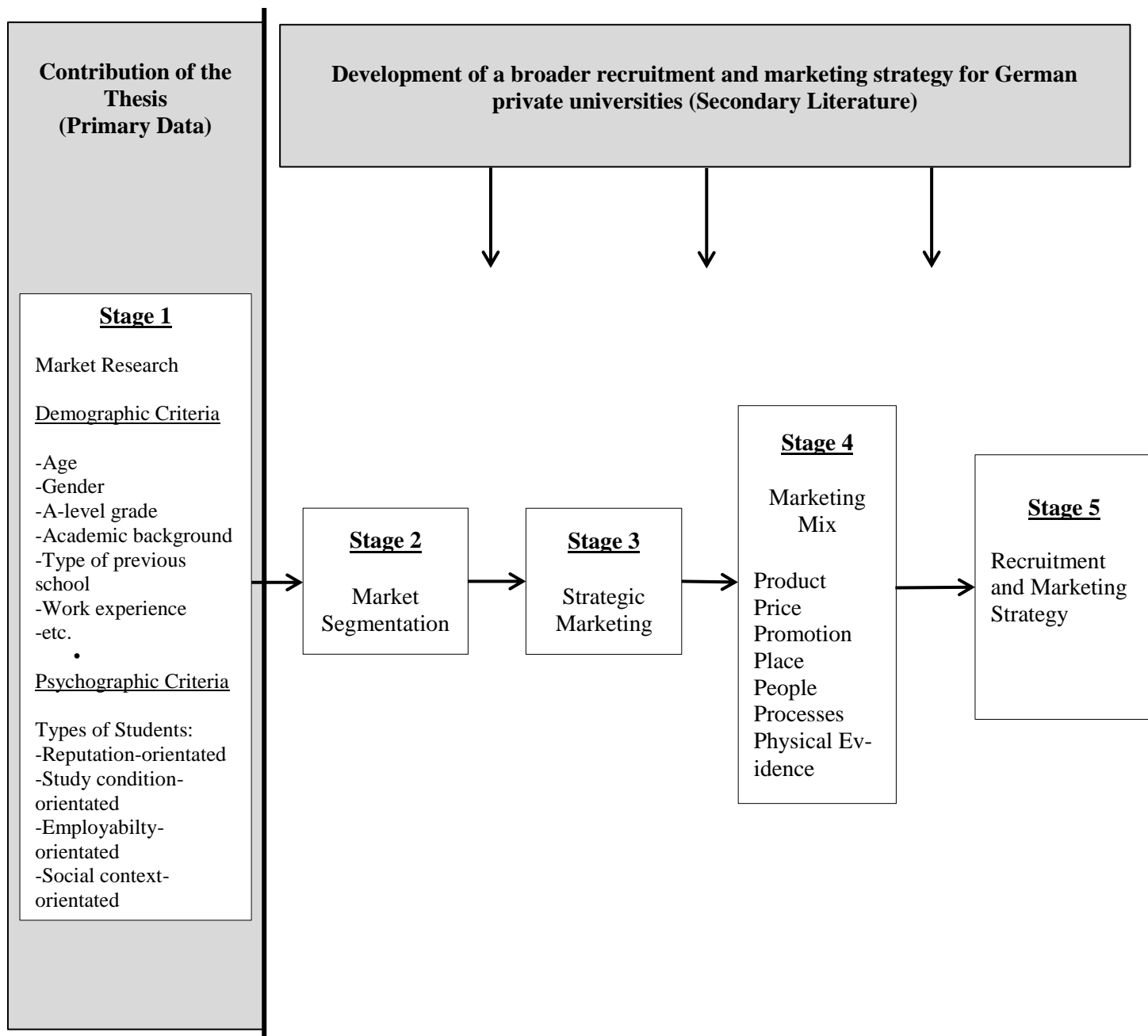


Figure 12 shows a conceptual model of students' recruitment and marketing for private universities in Germany. The model will help to find out about students' expectations and experiences and therefore support recruitment at private universities. The conceptual model is divided into five stages. The contribution of this thesis in form of primary data such as the statistical outcomes of students' expectations and experiences, types of students and specific target groups falls within the stage 1 of the conceptual model. The other stages are not part of the contribution of the study but are important steps to develop a broader marketing and recruitment strategy for German private universities.

Stage 1 – Market Research

The contribution of the thesis in form of collecting and analysing primary data (chapter 5) falls within the Stage 1. The stage of market research considers the analysis of students' expectations and experiences, prospective types of students and specific demographic target groups'. The market research stage is closely linked to chapter 5. This chapter points out systematically how to generate information about the selection criteria of different types of students subdivided along demographic criteria. A possible research approach is to hand out a survey in form of a questionnaire and ask students about demographic aspects as well as their selection criteria for a private university. Using statistical methods such as explorative factor analysis helps to classify students into specific types of students. This step highlights which selection criteria are most relevant and support classifying students into major types. Examples of the current study are reputation-orientated, study-condition-orientated, employability-orientated, social context orientated and image-orientated students. Such a student differentiation helps to narrow down a student sample to student target groups. Such an approach is necessary to identify the key selection criteria and to address later the relevant selection criteria of prospective students. However, to concentrate future marketing activities on specific psychographic criteria is not enough to recruit students. Moreover, it is important to combine psychographic with demographic criteria. This can be done by a multivariate regression analysis where the impacts of demographic criteria on psychographic criteria are tested (chapter 5.4.3). The outcomes support university marketers to allocate important demographic criteria to specific types of students. An example of the research findings is that young students who make their decision for a private university find recommendations by parents and friends important. Generally, the descriptive analysis in chapter 5.3.1 pointed out that recommendations by friends are less important for private university students. Furthermore, the study showed that students with a weak A-level are employability-orientated. An explanation for this find-

ing could be that weak A-level students assume that studying at a private university offers them better job opportunities. Often students expect closer links to companies, a more active alumni network as well as more support at a private university and therefore a better employability after graduation. This may lead students with poor marks to perceive better opportunities at private universities. University marketers could address the aspect of employability especially by students with a weaker A-level. In that stage it is important for private universities to reduce the sample of students by different statistical methods.

Stage 2 – Market Segmentation

The market segmentation is the stage where university managers and marketers have to segment prospective students into types of students and furthermore into specific student target groups. The different types of students are based on the outcomes of the market research.

An important step within the market segmentation therefore is to subdivide the most important generated types of students in specific target groups. Those specific students groups can be determined by demographic and psychographic criteria, common student preferences and interests. The classification in student target groups supports private universities to develop marketing strategies and activities for specific demographic types of students. On that basis private universities can develop better product differentiation strategies in form of i.e. various study programmes, company partnerships and alumni networks. To segment the market into specific student target groups such as i.e. reputation-, social context-, employability- and study condition-orientated students helps private universities to target more efficient prospective students. Furthermore, this approach supports positioning the private university better in the market. For example, private universities which offer dual study programmes position themselves as employability- and reputation-orientated in the market.

Stage 3 – Strategic Marketing

This stage includes the strategic marketing approach which considers next to the process of market segmentation also the process of internal marketing at private universities. As mentioned in chapter 3.4, the analysis of service selection criteria and the elaboration of service quality are closely linked to the aspects of internal marketing. The broad range of study programmes, the current changes of the higher education market and the relationship marketing addressed at companies, patrons and students (chapter 2.1) require well-educated employees who fulfill the expectations of prospective and current students. Furthermore, the internal marketing is an important aspect of service marketing and quality at a private university inter-

nal marketing involves the recruitment of university staff, their training and career development. Intrinsic and extrinsic motivations are significant aspects of a good performance of university employees. To feel participated in the development of the university is next to monetary aspect a motivation which helps to increase employee satisfaction. As mentioned in the interviews by Prof. Dr Holtbrügge (chapter 6.1.2) and Prof. Dr. Berg (chapter 6.1.3) satisfaction of university staff plays an important role at private universities. Private universities are often characterised by a high fluctuation rate of academic and professional staff. Reasons are financial security and higher wages at state universities. The consequences can be very negative. Image and reputation will decrease and the recruitment of students will be much harder. Therefore, the steady improvement of satisfaction of the university staff enables a better interactive recruitment and relationship marketing between the private university and prospective students.

Stage 4 – Marketing Mix

The marketing mix is characterised by seven classifications such as product, price, promotion, place, people, processes and physical evidence and is based strongly on the results of the previous research approaches like market research, market segmentation and the strategic management orientation. University managers have to decide on the basis of market research and market segmentation which prospective student target groups they want to address and recruit. After deciding and determining which student types and specific target groups should be addressed, the product strategy has to be launched. The product strategy depends on the institutional character of the private university. As mentioned in the previous chapters, this includes the study programme, the university facilities and company partnerships. Private universities, for example, which concentrate mostly on full-time bachelor and master study programmes have to address in their product strategy the content of the study programmes the modern university facilities such as the university building, equipment and relations to companies as potential future employers. Such a product strategy allows prospective students and their parents to calculate the return on investment they could receive for their tuition fees (chapter 2.2). The advertised product is not just to be the study programme other aspects which influence the decision for or against a private university are also important. For example, intensive mentoring and supporting students career aspects are further important criteria which have to be outlined and considered by developing a product marketing strategy for such a kind of private university. Furthermore, low priced study programmes can negatively influ-

ence the image and reputation of the private university. Students can assume a low value and poor employability chances after graduation by low priced study programmes.

The price calculation is one of the most important aspects of private universities and should be orientated on the market and competitors. As mentioned, one pricing orientation can be on the competitors. Another pricing strategy can be linked to students' employability expectations and their subsequent salaries. In addition, the pricing strategy of a private university has to involve the question if tuition fees have just to cover the costs of the institution or if they want to make profit. As mentioned in chapter 2.2 private and state universities are characterised as not-for profit organisations. Therefore, tuition fees that allow gaining profit will be difficult.

Another relevant aspect of the marketing mix is the promotion of the programmes and the transportation of the image of the private university. By addressing different types of students by age and gender allows university marketers to inform and recruit specific student target groups more intensively through promotional programmes, such as university fairs, open day's image campaigns, or adequate promotional material which addresses their expectations, preferences, wants and needs.

Furthermore, to consider and address specific selection criteria of different types of students on social network platforms will be another promotion form to recruit students. Some private universities promote their study programmes also on buses, in subways or on the backside of TV programming guides. Other private universities point out that it is possible to study without A-levels at their institution. However, such marketing and recruitment campaigns can also have a negative effect. Such promotional campaigns express that anybody can study at this private university and highlight explicitly the commercial aspect of the institution. Although, private universities rely on tuition fees, they should find a balance of promoting and placing their study programmes as well as to call attention for their institution.

Moreover, well-educated and motivated university staff will be necessary to promote the study programmes and to address the adequate student target group. Therefore, the internal marketing in form of recruiting suitable university staff plays a significant role for promoting the study programmes (chapter 3.4.2).

Packaging is closely linked to the placement of the product or service. This refers to the way the study programmes, the service quality and the whole university will be seen by external partners, such as prospective students, companies, alumni, etc. Short promotional films where

current students and alumni speak about their education experience as well as company partners explain the advantages to study at a certain private university will help prospective students to get an impression. University social media platform can be a suitable instrument to place these short promotional films.

Stage 5 – Recruitment and Marketing Strategy

Finally, the recruitment strategy is the result of the previous stages. The recruitment strategy is characterised by precisely matched prospective types of students and developed marketing and recruiting activities which address student expectations, preferences and wants. However, professional and academic university staff plays an important role to implement successfully the recruitment and marketing strategy. As mentioned in chapter 3.4.2, the recruitment of reliable and well-educated university academic and professional staff is relevant for students' recruitment process. Private universities should therefore put particular emphasis on this aspect.

8. Contributions, Limitations and Implications for Future Research

8.1 Summary of Main Results

1. What are the most relevant selection criteria for students in their decision process for a private university? Does the identification and evaluation of selection criteria differ between different target groups?

The study showed that the employability, academic reputation, links to companies and university facilities have been the most relevant selection criteria for students within their decision process for the private university (chapter 5.3.1). Other selection criteria such as appearance at university fairs, the university image, reputation of professors and the ranking of the university less influence the students' decision process are still considered by students. Another result is the relatively low relevance of research reputation and university rankings at state universities. While institutional rankings, such as the CHE University Ranking, and individual rankings, such as the Handelsblatt Ranking, receive large public attention, they are obviously less relevant for students' decision process. This is remarkable since these rankings are based on quantitative and observable criteria, such as research output, amount of third-party funding and professors-students ratios, and large sample sizes. Instead, students seem to base their selection and evaluation of a private university on more subjective criteria which are hardly observable and measurable, like the employability, overall university image or the university facilities. The university facilities are an important indicator for students' choice of a private university. Students may also regard good facilities as an indicator of strong links to companies that often sponsor modern equipment in compensation of declining government support.

The results for the private university showed that the identification and evaluation of selection criteria differ between different target groups. For example, Students who have a weak A-level are more employability-orientated than students with a better A-level (selection phase). That implicates that students' recruiters should highlight links to companies, internship programmes, alumni careers and practice-orientated education for this type of students. In addition, the multivariate regression analysis emphasised that students who received their A-level at a private school are more employment-orientated than students from public schools. Therefore, private university marketers should focus for this target group more on employability than on reputational topics (academic or research reputation). Furthermore, marketing activities, such as word-of-mouth activities or recommendations by friends, should be concentrated

on younger students. Older students are less influenced by recommendations by friends while the decision process of younger students is more guided by parents and friends. Older students make their decision for a private university more based on personal considerations. They have an independent opinion and are less influenced by friends' recommendations. Reasons can be a previous apprenticeship and a more structured view about possible study programmes and career pathways.

The evaluation phase underlined the importance of the image of private universities for students who have no relationship to or information about private universities. The image and especially the reputation of the private university can be seen as indicator for recruiting and keeping students. Students from public schools have concerns about investing tuition fees in education. Student recruiters should demonstrate to this type of students the advantages of an investment into education, financing options, scholarship programmes, dual study programmes, etc. To display a return of investment for students can be one convincing marketing approach. On the contrary, students from private schools are used to paying for education and therefore consider other criteria as important, such as university facilities, image, low entry barriers and the aspect of fun. Interesting for university recruiters and managers is the fact that male students are more social-context orientated than female students in their retrospective view. That implicates to recruit male students for master programmes by word of mouth activities, more personal contact, recommendations of friends or alumni and other supportive activities which are social-context orientated. In this context, female students have a more an independent approach in their evaluation view. Thus, social-context orientated criteria are less adequate to recruit female students. Employability and image-orientated criteria are therefore more important for recruiting female students in higher semesters.

2. Do these criteria differ for student recruitment, and if so, how might this be used to form recruitment strategies by private universities?

The study showed that the selection criteria differ for student recruitment based on student type. This approach helps to find out in more detail about different student preferences. In result, private universities can develop more effective recruitment and marketing strategies to address prospective students' needs and wants. At the private university, employability and social- context orientated students have been significant types of students. Therefore, the private universities have to develop marketing and recruitment strategies which address the pref-

erences, wants and needs of those indicated types of students. In addition, the usage of demographic criteria supports marketing and recruitment strategies by addressing specific target groups' within the different types of students. To subdivide types of students by demographic aspects such as gender, age, family or academic background helps marketers to find to address better student selection criteria and help helps to implement recruitment strategies more successfully.

Applied to the current study, employability-orientated students choose a private university because of links to companies and employability after graduation. This type of student takes particular care that the private university has a broad company network, offers internships or dual study programmes and has a high percentage of alumni in good jobs. Recruitment strategies should therefore use such information and address more employability-orientated selection criteria and aspects by prospective weak A-level students. Therefore, recruitment strategies should include a communication strategy which signals strong connections to companies, shows alumni careers and displays academics with a strong business background. In addition, the study pointed out that another type of student to recruit is the social context-orientated type. This type of student takes recommendations of friends and parents into consideration by choosing a private university. This type is more influenced by opinions of others than by personal considerations. Recruitment strategies therefore should always consider and involve parents and friends. Furthermore, the study indicated that especially male students are social context-orientated in their decision process. To invite prospective male students and their parents to open days or interviews could support effectively recruitment strategies. Furthermore, to outline future employability chances, the alumni network, prospective company internships or specific mentoring during the bachelor or master thesis helps also to point out the return of investment for parents by choosing a private university

3. Can different types of students be identified who regard different criteria as relevant when deciding about a private university? How can private universities adapt their market segmentation and marketing mix to specific target groups.

The study identified three types of students who regard different selection criteria as relevant when deciding about the private university (chapter 5.4.2).

Types of students in the selection phase (private University)

1. Employability-orientated students
2. Social context-orientated students
3. Image and marketing-orientated students

Furthermore, the evaluation perspective of the selection criteria highlighted a different result and therefore different types of students. The analysis indicated four types of students.

1. Reputation-orientated students
2. Employability-orientated students
3. Facility-orientated students
4. Ranking-orientated students

From the university perspective, university marketers can use the above identified types of students as market segmentation criteria. The information about different types of students helps university marketers to address current students' preferences, wants and needs. Furthermore, private universities can adapt their market segmentation to specific student target groups by determining selection criteria by different demographic criteria such as age, gender or academic background. Such an approach allows university marketers to narrow down researched types of students more specifically and address better group specific selection criteria. Furthermore, influence the identification of specific student target groups the marketing mix activities. Preferences and expectations of these groups can be better addressed in brochures, at university fairs, at open days or by other marketing activities. For example, has a private university mostly employability orientated students, the marketing mix activities should focus on cooperate relations, internships, practical programmes, open university days where students can apply for a dual study partnership at a company and an effective career center which supports placing students after graduation. Furthermore, to offer students to write their Bachelor or Master thesis in combination with a company helps to establish a relation to a company and also a better job placement for the student afterwards. On the contrary, has a private university also students who are social-context orientated in form of recommendation by parents, the focus of the marketing mix activities should include aspects which addresses parents wants. Therefore, university marketing activities can be i.e. student/ parents'

days, communicating the alumni network and the success of former students as well as the return on investment for parents by paying tuition for education.

4. How can private universities in Germany improve their marketing activities in order to recruit and keep qualified students? How can relevant information about students' selection strategies be integrated in a conceptual model of marketing and recruitment at German private universities?

The integration of relevant information starts in stage 2 of the conceptual model (chapter 7). The outcomes of a detailed market research support effectively market segmentation in form of defining the most important types of students. The results are important inputs for stage 3 (strategic marketing) which is strongly orientated on the process of market segmentation by focusing on the most relevant types of students. However, this stage is also closely linked to the internal marketing of a private university. To address the relevant types of students', the academic and professional university staff have to be motivated, satisfied with their work place and well educated. Often private universities are characterised by a high fluctuation rate of staff. Furthermore, to see students and their parents as active partners denies a purely economic and commercial university student relationship and build up a positive image of the university. Without this aspect the strategic marketing approach to recruit students cannot be successfully implemented. Therefore, stage 4 (marketing mix) depends highly on the information about the identified types of students as well as the personal involvement, motivation and willingness of the professional staff to promote the study programmes. In this stage appropriate marketing mix activities have to be identified on the results of the previous stages. Stage 5 considers the information of the previous steps and develops as a result a student recruitment an marketingstrategy.

8.2 Theoretical Contributions

This study contributes to the existing literature on the marketing of higher education institutions by exploring criteria which are relevant for students' decisions. While currently "no model focuses on the selection of a university and the multiplicity of aspects influencing the decision of where to study" (Obermeit, 2012: 221), this study makes an important contribution to the research on German students' choices of universities. In particular, the study extends the current literature that is mainly restricted to a limited number of factors, such as the attractiveness and reputation of the institution (Hachmeister and Hennigs, 2007), recommendation by friends (Guggenberger, 1991), university facilities (Tutt, 1997) or the ability of finding employment during and after the study (Binsardi and Ekwulugo, 2003), by demonstrating that the decision for a higher education institution is a complex and multivariate process which involves several academic and non-academic factors.

Another important theoretical contribution of the study is the inclusion of various demographic and psychographic criteria. While previous research mostly considers the impact of age and gender (Obermeit, 2012; Willich et al., 2011), this study shows that the selection and evaluation criteria also differ with regard to A-level marks, family background and school type (private vs. public). Moreover, the relevance of different selection and evaluation criteria of students at state and private universities in Germany is demonstrated. While existing research is at least implicitly focused on state universities, the thesis shows that significant differences between the types of higher education institutions exist. Thus, institutional characteristics should be integrated in models that seek to explain the choice of higher education institutions and considered in future research in this context.

The study further extends the current literature by showing that the selection and evaluation criteria of students before and after entering a university differ. This relates to the discussion of the SERVQUAL model (chapter 3.3) which is mainly focused on the selection of customers (Babakus and Boller, 1992). The results of this study reveal those students' expectations prior to their decision for a state or private university and their selections after entering the institution may differ significantly. Thus, different marketing strategies for prospective students and those already inscribed are needed. Future studies may extend this perspective and test their impact on student attraction and retention. Moreover, it would be interesting to include

students' academic and non-academic performance and to analyse their relationship with different selection and evaluation criteria.

Finally, the study contributes to the more general literature on service marketing by applying this to the context of marketing of higher education (Reckenfelderbäumer and Kim, 2006; Voss, 2009; Obermeit, 2012). In particular, the study underlines the relevance of adequate market selection and market segmentation for market success. Students at higher education institutions in Germany are characterised by great diversity in terms of expectations towards and experiences with these institutions. Moreover, large demographic and psychographic differences were observed which affect their selections and evaluations. Thus, a differentiated marketing concept is needed that reflects and acknowledges this diversity for developing adequate marketing mix strategies.

8.3 Managerial Implications

The results have important implications for the marketing of higher education institutions in Germany. Generally, students' selection and evaluation criteria differ between students at state and private universities. For example, links to companies are more important and recommendations by friends less important for the latter compared to students at state universities. Managers of these institutions should therefore be aware of their individual selections and target their marketing strategy accordingly.

As employability after graduation revealed to be the most important selection and evaluation criterion, universities should include this in their curricula and communication policy. Options are dual study programmes which combine university courses with practical experiences in companies. Moreover, successful alumni may be invited to give guest lectures and provide career consulting. Since this study demonstrates that the selection and evaluation of a higher education institution is based strongly on subjective selections rather than on more objective and measurable criteria, it is also important to include the aspect of employability in brochures, homepage and other elements of the communication policy. While this suggestion may be embraced by private universities, state universities may find this to collide with their self-image of providing education in a broad and holistic sense rather than professional training that is oriented towards the demands of private companies.

Another implication can be derived from the longitudinal analysis of selection and evaluation criteria. While the marketing activities of state universities may focus on the same criteria for

recruitment and selection of students, private universities should consider that the relative importance of some criteria varies between the two phases. In particular, non-academic criteria, such as university facilities, the appearance at university fairs and recommendations by friends, are less important for matriculated than for prospective students. Thus, marketing activities directed to matriculated students should focus more on academic criteria, such as the institution's research reputation and the reputation of professors that are less relevant in the selection phase.

Furthermore, are the managerial implications of the explorative factor analysis (EFA) important. The EFA reduces and narrow down the catalogue of students' selection criteria in their selection and evaluation phase by identifying types of students. The analysis pointed out different student types which can be observed in the selection phase and in the evaluation phase at the state and private university. The outcomes are important for managerial implications for university marketers and university management to recruit students and to address the relevant wants and needs of these types of students. The EFA supports market segmentation especially of student target groups. The adequate market selection and segmentation is the basis for deciding about the marketing strategy and the marketing instruments. Service selection criteria and the evaluation of service quality are the basis for developing an adequate marketing strategy to recruit and retain students. External marketing activities between the university and their students as well as internal marketing activities are important aspects for recruiting and retaining students. Internal marketing activities such as a systematic planning, decision process, aims, strategies and instruments have to be communicated and to put by the management into action.

The multivariate regression analysis gives university managers and recruiters managerial implications and indications which type of students get influenced by students' demographic characteristics. The regression analysis helps university managers and marketers to divide the types of students by .i.e. age, gender, family background or school grades. The demographic aspects assist to divide students in more selected target groups. The regression analysis supports the EFA in a more detailed perspective. University managers and marketers can therefore better target specific student groups for recruitment and retaining.

8.4 Limitations and Implications for Future Research

Some limitations have to be considered when interpreting the results. First, the study is based on the selections of students at one point in time. While it allows to get reliable responses about the evaluation of higher education institutions from the current perspective, the criteria that have been relevant for their selection, i.e. prior to matriculation, may be over- or underestimated. To avoid this respondent bias, future studies should collect data at two points in time, i.e. before and after matriculation.

Another limitation is the regional scope of our study. The universities in the sample are both located in Hamburg and it is unclear whether similar results would be obtained in other regions as well. As the second largest city in Germany that hosts a large number of state and private universities, Hamburg is an ideal location for a comparative study of this kind. However, it has some unique characteristics that make it difficult to generalise our results. For example, Hamburg hosts a large number of wealthy people who can afford to pay tuitions fees at private universities. This is not the case, for example, in many cities in Eastern Germany. Moreover, Hamburg is regarded as one of the most attractive cities in Germany which may have affected the evaluation of higher education institutions as well. Therefore, future studies should collect data in various cities and regions and test whether the location of an institution influences the students' selection and evaluation process at German private universities. At the same time, cross-country studies are useful to compare the students' selection and evaluation process private universities in different countries

This study is limited to the comparison of students of business administration at two types of higher education institutions. It would be interesting to include also demographic and psychographic characteristics of students and test whether they affect the selection and evaluation of universities. For example, it may be expected that this is influenced by their marks at school and their family background, i.e. whether their parents and siblings have studied as well. The inclusion of these variables would allow for more fine-grained market segmentation and a more comprehensive target group analysis.

Finally, the respondents in this study were asked to assess their university in general. For university managers it would be particularly useful to learn more about students' evaluations of specific aspects, such as their study programs, recruitment processes or marketing activities. For example, future studies may explore how prospective students react on universities'

communication activities by evaluating their mission statements, homepages, brochures and face-to-face interactions. This would allow for a more customer-oriented marketing strategy and a more substantiated positioning of their institution in the higher education sector.

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Appendices

Appendix 1: Main Characteristics of State and Private Universities in Germany

Main characteristics of state universities in Germany (listed according to their main location)

Number	Name of the State University	Right to award Doctorates	Foundation	Number of Students	Year Status
1	Archivschule Marburg	no	0	49	2012/13 (WS)
2	Ruprecht-Karls-Universität Heidelberg	yes	1386	30880	2013/14 (WS)
3	Universität Leipzig	yes	1409	26772	2012/13 (WS)
4	Universität Rostock	yes	1419	15063	2012/13 (WS)
5	Ernst-Moritz-Arndt-Universität Greifswald	yes	1456	11736	2012/13 (WS)
6	Albert-Ludwigs-Universität Freiburg	Yes	1457	24741	2013/14 (WS)
7	Ludwig-Maximilians-Universität München	yes	1472	50542	2013/14 (WS)
8	Eberhard Karls Universität Tübingen	yes	1477	28700	2013/14 (WS)
9	Philipps-Universität Marburg	yes	1527	25700	2013/14 (WS)
10	Friedrich-Schiller-Universität Jena	yes	1558	19704	2012/13 (WS)
11	Julius-Maximilians-Universität Würzburg	yes	1582	24465	2012/13 (WS)
12	Justus-Liebig-Universität Gießen	yes	1607	26500	2013/14 (WS)
13	Akademie der Bildenden Künste Nürnberg	no	1662	317	2012/13 (WS)
14	Christian-Albrechts-Universität zu Kiel	yes	1665	24222	2012/13 (WS)
15	Universität der Künste Berlin	Yes	1696	3447	2012/13 (WS)
16	Georg-August-Universität Göttingen	yes	1734	25630	2012/13 (WS)
17	Friedrich-Alexander-Universität Erlangen-Nürnberg	Yes	1742	37891	2013/14 (WS)
18	Technische Universität Braunschweig	Yes	1745	17129	2013/14 (WS)
19	Staatliche Akademie der Bildenden Künste Stuttgart	yes	1761	760	2012/13 (WS)
20	Hochschule für Bildende Künste Dresden	Yes	1764	599	2012/13 (WS)
21	Hochschule für Grafik und Buchkunst Leipzig	yes	1764	568	2012/13 (WS)
22	Technische Universität Bergakademie Freiberg	Yes	1765	5455	2012/13 (WS)
23	Hochschule für bildende Künste Hamburg	yes	1767	884	2012/13 (WS)

24	Technische Universität Berlin	Yes	1770	31427	2013/14 (WS)
25	Kunstakademie Düsseldorf	Yes	1773	608	2012/13 (WS)
26	Technische Universität Clausthal	Yes	1775	4551	2014 (SS)
27	Hochschule für Gestaltung Schwäbisch Gmünd	no	1776	642	2012/13 (WS)
28	Kunsthochschule Kassel	no	1777	783	2012/13 (WS)
29	Tierärztliche Hochschule Hannover	yes	1778	2459	2012/13 (WS)
30	Westfälische Wilhelms-Universität (Münster)	yes	1780	42592	2013/14 (WS)
31	Hochschule für Musik Würzburg	yes	1797	632	2012/13 (WS)
32	Hochschule für Technik und Wirtschaft des Saarlandes (Saarbrücken)	no	1807	5575	2012/13 (WS)
33	Akademie der Bildenden Künste München	no	1808	676	2012/13 (WS)
34	Humboldt-Universität zu Berlin	Yes	1810	33500	2013/14 (WS)
35	Hochschule für Musik Karlsruhe	yes	1812	648	2012/13 (WS)
36	Martin-Luther-Universität Halle-Wittenberg	yes	1817	20390	2012/13 (WS)
37	Rheinische Friedrich-Wilhelms-Universität Bonn	Yes	1818	30376	2012/13 (WS)
38	Universität Hohenheim (Stuttgart)	yes	1818	9283	2012/13 (WS)
39	Beuth Hochschule für Technik Berlin	No	1823	11185	2012/13 (WS)
40	Technische Hochschule Nürnberg Georg Simon Ohm	no	1823	10878	2012/13 (WS)
41	Karlsruher Institut für Technologie	yes	1825	24528	2013/14 (WS)
42	Pädagogische Hochschule Schwäbisch Gmünd	yes	1825	2691	2012/13 (WS)
43	Technische Universität Dresden	Yes	1828	37134	2013/14 (WS)
44	Staatliche Hochschule für Bildende Künste – Städelschule (Frankfurt am Main)	No	1829	196	2012/13 (WS)
45	Universität Stuttgart	yes	1829	26457	2013/14 (WS)
46	Gottfried Wilhelm Leibniz Universität Hannover	yes	1831	23900	2013/14 (WS)
47	Hochschule für Gestaltung Offenbach am Main	no	1832	644	2012/13 (WS)
48	Technische Universität Chemnitz	Yes	1836	11231	2013/14 (WS)
49	Hochschule für Musik und Theater „Felix Mendelssohn Bartholdy“ Leipzig	yes	1843	1036	2012/13 (WS)
50	Hochschule für Musik und Theater München	yes	1846	1033	2012/13 (WS)
51	Hochschule Furtwangen	No	1850	5840	2012/13 (WS)
52	Hochschule für Musik und Tanz Köln	yes	1850	1568	2012/13 (WS)

53	Staatliche Akademie der Bildenden Künste Karlsruhe	no	1854	307	2012/13 (WS)
54	Hochschule Reutlingen	no	1855	5091	2012/13 (WS)
55	Hochschule für Musik Carl Maria von Weber Dresden	Yes	1856	554	2012/13 (WS)
56	Hochschule für Musik und Darstellende Kunst Stuttgart	yes	1857	718	2012/13 (WS)
57	Bauhaus-Universität Weimar	yes	1860	4172	2012/13 (WS)
58	Hochschule Mittweida	no	1867	6009	2012/13 (WS)
59	Technische Universität München	yes	1868	35979	2013/14 (WS)
60	RWTH Aachen	Yes	1870	40375	2013/14 (WS)
61	Hochschule für Musik Franz Liszt Weimar	yes	1872	828	2012/13 (WS)
62	Hochschule für Künste Bremen	No	1873	903	2012/13 (WS)
63	Technische Universität Darmstadt	Yes	1877	25100	2013/14 (WS)
64	Hochschule Pforzheim	no	1877	5442	2012/13 (WS)
65	Burg Giebichenstein Kunsthochschule Halle	no	1879	1059	2012/13 (WS)
66	Fachhochschule Flensburg	No	1886	4047	2012/13 (WS)
67	Technische Universität Ilmenau	yes	1894	6909	2012/13 (WS)
68	Fachhochschule Bingen	No	1897	2596	2012/13 (WS)
69	Hochschule für Musik, Theater und Medien Hannover	yes	1897	1287	2012/13 (WS)
70	Hochschule Mannheim	no	1898	5106	2012/13 (WS)
71	Pädagogische Hochschule Heidelberg	yes	1904	4478	2012/13 (WS)
72	Hochschule Konstanz Technik, Wirtschaft und Gestaltung	no	1906	4535	2012/13 (WS)
73	Alice Salomon Hochschule Berlin	No	1908	3051	2012/13 (WS)
74	Hochschule Wismar	no	1908	7379	2012/13 (WS)
75	Johann Wolfgang Goethe-Universität Frankfurt am Main	Yes	1914	45357	2013/14 (WS)
76	Universität Hamburg	yes	1919	40475	2012/13 (WS)
77	Universität zu Köln	yes	1919	48708	2013/14 (WS)
78	Palucca Hochschule für Tanz Dresden	Yes	1925	164	2012/13 (WS)
79	Folkwang Universität der Künste (Essen)	Yes	1927	1506	2012/13 (WS)
80	Hochschule für Musik und Darstellende Kunst Frankfurt am Main	Yes	1938	862	2012/13 (WS)
81	Hochschule für Musik Trossingen	yes	1944	472	2012/13 (WS)

82	Kunsthochschule Berlin-Weißensee	No	1946	802	2012/13 (WS)
83	Hochschule für Musik Detmold	Yes	1946	646	2012/13 (WS)
84	Hochschule für Musik Freiburg	Yes	1946	517	2012/13 (WS)
85	Universität Hildesheim	yes	1946	6048	2012/13 (WS)
86	Leuphana Universität Lüneburg	yes	1946	7749	2012/13 (WS)
87	Johannes Gutenberg-Universität Mainz	yes	1946	37039	2012/13 (WS)
88	Deutsche Sporthochschule Köln	yes	1947	4679	2012/13 (WS)
89	Hochschule für Musik Saar (Saarbrücken)	yes	1947	445	2012/13 (WS)
90	Deutsche Universität für Verwaltungswissenschaften Speyer	yes	1947	336	2012/13 (WS)
91	Freie Universität Berlin	Yes	1948	33300	2012/13 (WS)
92	Universität des Saarlandes (Saarbrücken, Homburg)	yes	1948	17966	2012/13 (WS)
93	Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen	no	1949	4577	2012/13 (WS)
94	Pädagogische Hochschule Weingarten	yes	1949	3266	2012/13 (WS)
95	Hochschule für Politik München	Yes	1950	525	2012/13 (WS)
96	Hochschule für Musik „Hanns Eisler“ Berlin	No	1950	488	2012/13 (WS)
97	Hochschule für Musik und Theater Hamburg	yes	1950	1252	2012/13 (WS)
98	Theologische Fakultät Trier	yes	1950	390	2012/13 (WS)
99	Hochschule für Schauspielkunst „Ernst Busch“ Berlin	No	1951	221	2012/13 (WS)
100	Fachhochschule Schwetzingen	no	1953	436	2012/13 (WS)
101	Filmuniversität Babelsberg (Potsdam)	yes	1954	566	2012/13 (WS)
102	Medizinische Hochschule Hannover	yes	1961	3256	2012/13 (WS)
103	Hochschule Heilbronn	no	1961	7917	2012/13 (WS)
104	Hochschule Aalen	No	1962	4970	2012/13 (WS)
105	Ruhr-Universität Bochum	Yes	1962	41456	2013/14 (WS)
106	Pädagogische Hochschule Freiburg	Yes	1962	5067	2012/13 (WS)
107	Pädagogische Hochschule Karlsruhe	yes	1962	3613	2012/13 (WS)
108	Pädagogische Hochschule Ludwigsburg	yes	1962	5620	2012/13 (WS)
109	Universität Regensburg	yes	1962	19554	2012/13 (WS)
110	Hochschule für Bildende Künste Braunschweig	Yes	1963	1065	2012/13 (WS)
111	Hochschule Biberach	No	1964	2370	2012/13

					(WS)
112	Universität zu Lübeck	yes	1964	3345	2012/13 (WS)
113	Hochschule Offenburg	no	1964	4096	2012/13 (WS)
114	Hochschule Ravensburg-Weingarten	no	1964	3287	2012/13 (WS)
115	Heinrich-Heine-Universität Düsseldorf	Yes	1965	27649	2013/14 (WS)
116	Hochschule Ludwigshafen am Rhein	no	1965	4287	2012/13 (WS)
117	Deutsche Film- und Fernsehakademie Berlin	No	1966	34	2011
118	Universität Konstanz	yes	1966	10979	2012/13 (WS)
119	Hochschule für Fernsehen und Film München	no	1966	381	2012/13 (WS)
120	Universität Mannheim	yes	1967	11882	2012/13 (WS)
121	Universität Ulm	yes	1967	9589	2012/13 (WS)
122	Technische Universität Dortmund	Yes	1968	31500	2013/14 (WS)
123	Universität Bielefeld	Yes	1969	19785	2012/13 (WS)
124	Fachhochschule Kiel	no	1969	6471	2012/13 (WS)
125	Fachhochschule Lübeck	no	1969	4339	2012/13 (WS)
126	Universität Augsburg	Yes	1970	17716	2012/13 (WS)
127	Hochschule für Angewandte Wissenschaften Hamburg	no	1970	14928	2012/13 (WS)
128	Technische Universität Kaiserslautern	yes	1970	13513	2012/13 (WS)
129	Universität Kassel	yes	1970	22877	2013/14 (WS)
130	Universität Trier	yes	1970	15074	2012/13 (WS)
131	Hochschule Albstadt-Sigmaringen	No	1971	2925	2012/13 (WS)
132	Hochschule Augsburg	No	1971	5324	2012/13 (WS)
133	Hochschule für Wirtschaft und Recht Berlin	No	1971	9714	2012/13 (WS)
134	Fachhochschule Bielefeld	No	1971	8633	2012/13 (WS)
135	Universität Bremen	Yes	1971	19234	2013/14 (WS)
136	Hochschule für angewandte Wissenschaften Coburg	No	1971	4446	2012/13 (WS)
137	Hochschule Darmstadt	Yes	1971	12838	2012/13 (WS)
138	Fachhochschule Dortmund	No	1971	11166	2012/13 (WS)
139	Fachhochschule Düsseldorf	No	1971	8532	2012/13 (WS)
140	Hochschule Esslingen	No	1971	6018	2012/13 (WS)

141	Fachhochschule Frankfurt am Main	No	1971	10683	2012/13 (WS)
142	Technische Hochschule Mittelhessen (Gießen, Friedberg, Wetzlar)	no	1971	13790	2012/13 (WS)
143	Hochschule Hannover	no	1971	8393	2012/13 (WS)
144	HAWK Hochschule Hildesheim/Holzminde/Göttingen	no	1971	5193	2012/13 (WS)
145	Fachhochschule Kaiserslautern	no	1971	5622	2012/13 (WS)
146	Hochschule Karlsruhe – Technik und Wirtschaft	no	1971	7672	2012/13 (WS)
147	Hochschule für öffentliche Verwaltung Kehl	no	1971	991	2012/13 (WS)
148	Fachhochschule Köln	no	1971	21025	2012/13 (WS)
149	Hochschule Ostwestfalen-Lippe (Lemgo)	no	1971	6361	2012/13 (WS)
150	Fachhochschule Mainz	no	1971	4773	2012/13 (WS)
151	Hochschule für Musik und Darstellende Kunst Mannheim	yes	1971	642	2012/13 (WS)
152	Hochschule für angewandte Wissenschaften München	no	1971	17191	2012/13 (WS)
153	Fachhochschule Münster	no	1971	11686	2012/13 (WS)
154	Kunstakademie Münster	yes	1971	332	2012/13 (WS)
155	Hochschule Niederrhein (Krefeld/Mönchengladbach)	no	1971	12629	2012/13 (WS)
156	Hochschule Osnabrück	no	1971	11434	2012/13 (WS)
157	Ostbayerische Technische Hochschule Regensburg	no	1971	9750	2013/14 (WS)
158	Hochschule Rosenheim	no	1971	4062	2012/13 (WS)
159	Hochschule für Technik Stuttgart	no	1971	3738	2012/13 (WS)
160	Hochschule Ulm	no	1971	4018	2012/13 (WS)
161	Hochschule Weihenstephan-Triesdorf	no	1971	5662	2012/13 (WS)
162	Hochschule RheinMain (Wiesbaden und Rüsselsheim)	no	1971	10322	2012/13 (WS)
163	Ostfalia Hochschule für angewandte Wissenschaften (Wolfenbüttel, Salzgitter, Wolfsburg, Suderberg)	no	1971	11042	2012/13 (WS)
164	Hochschule für angewandte Wissenschaften Würzburg-Schweinfurt	no	1971	8833	2012/13 (WS)
165	Otto-Friedrich-Universität Bamberg	Yes	1972	12023	2012/13 (WS)
166	Hochschule Bochum	No	1972	6047	2012/13 (WS)
167	Robert-Schumann-Hochschule Düsseldorf	Yes	1972	890	2012/13 (WS)
168	Universität Paderborn	yes	1972	19410	2013/14 (WS)
169	Universität Siegen	yes	1972	18604	2013/14

					(WS)
170	Bergische Universität Wuppertal	yes	1972	19000	2013/14 (WS)
171	Helmut-Schmidt-Universität (Hamburg)	yes	1973	2638	2012/13 (WS)
172	Musikhochschule Lübeck	no	1973	369	2012/13 (WS)
173	Universität der Bundeswehr München	yes	1973	2944	2012/13 (WS)
174	Carl von Ossietzky Universität Oldenburg	yes	1973	11406	2012/13 (WS)
175	Fachhochschule für öffentliche Verwaltung und Rechtspflege in Bayern(München)	No	1974	3824	2012/13 (WS)
176	Hochschule Fulda	No	1974	6514	2012/13 (WS)
177	Fernuniversität in Hagen	yes	1974	88168	2013/14 (WS)
178	Universität Osnabrück	yes	1974	11259	2012/13 (WS)
179	Fachhochschule für Verwaltung und Dienstleistung (Altenholz, Reinfeld)	No	1975	807	2012/13 (WS)
180	Universität Bayreuth	Yes	1975	11348	2012/13 (WS)
181	Hochschule Bremerhaven	No	1975	3093	2012/13 (WS)
182	Fachhochschule für Rechtspflege Nord-rhein-Westfalen (Bad Münstereifel)	No	1976	685	2012/13 (WS)
183	Fachhochschule für öffentliche Verwaltung Nordrhein-Westfalen(Gelsenkirchen)	No	1976	6881	2012/13 (WS)
184	Hochschule der Deutschen Bundes-bank (Hachenburg)	no	1976	317	2012/13 (WS)
185	Fachhochschule für Finanzen Nordrhein-Westfalen (Nordkirchen)	no	1976	1464	2012/13 (WS)
186	Hochschule für angewandte Wissenschaften Kempten	no	1977	4789	2012/13 (WS)
187	Fachhochschule des Bundes für öffentliche Verwaltung (Brühl)	No	1978	1085	2012/13 (WS)
188	Technische Universität Hamburg-Harburg	yes	1978	6376	2012/13 (WS)
189	Hochschule Landshut	no	1978	4274	2012/13 (WS)
190	Universität Passau	yes	1978	10007	2012/13 (WS)
191	Fachhochschule Worms	no	1978	3126	2012/13 (WS)
192	Hochschule für Öffentliche Verwaltung Bremen	No	1979	375	2012/13 (WS)
193	Hochschule für Forstwirtschaft Rottenburg	no	1979	865	2012/13 (WS)
194	Hochschule für Polizei Villingen-Schwenningen	no	1979	1251	2012/13 (WS)
195	Hessische Hochschule für Finanzen und Rechtspflege (Rotenburg an der Fulda)	no	1980	879	2012/13 (WS)
196	Fachhochschule für Verwaltung des Saar-landes (Saarbrücken)	no	1980	458	2012/13 (WS)
197	Hessische Hochschule für Polizei und Verwaltung (Wiesbaden)	no	1980	2692	2012/13 (WS)

198	Fachhochschule für Finanzen (Edenkoben)	No	1981	474	2012/13 (WS)
199	Fachhochschule für öffentliche Verwaltung Rheinland-Pfalz (Mayen, Lautzenhausen)	yes	1981	1692	2012/13 (WS)
200	Hochschule Bremen	No	1982	8917	2012/13 (WS)
201	Hochschule der Bildenden Künste Saar (Saarbrücken)	no	1989	397	2012/13 (WS)
202	Universität Koblenz-Landau	yes	1990	14133	2012/13 (WS)
203	Kunsthochschule für Medien Köln	yes	1990	328	2012/13 (WS)
204	Hochschule Anhalt (Bernburg, Dessau und Köthen)	No	1991	4761	2012/13 (WS)
205	Fachhochschule Erfurt	No	1991	4589	2012/13 (WS)
206	Fachhochschule für öffentliche Verwaltung, Polizei und Rechtspflege(Güstrow)	no	1991	466	2012/13 (WS)
207	Ernst-Abbe-Fachhochschule Jena	no	1991	4702	2012/13 (WS)
208	Fachhochschule für Finanzen (Brandenburg) (Königs Wusterhausen)	no	1991	580	2012/13 (WS)
209	Filmakademie Baden-Württemberg (Ludwigsburg)	no	1991	0	0
210	Hochschule Magdeburg-Stendal	no	1991	6674	2012/13 (WS)
211	Hochschule Neubrandenburg	no	1991	2086	2012/13 (WS)
212	Fachhochschule Potsdam	no	1991	3283	2012/13 (WS)
213	Universität Potsdam	yes	1991	19972	2013/14 (WS)
214	Fachhochschule Schmalkalden	no	1991	2836	2012/13 (WS)
215	Fachhochschule Stralsund	no	1991	2453	2012/13 (WS)
216	Hochschule Harz (Wernigerode und Halberstadt)	no	1991	3182	2012/13 (WS)
217	Technische Hochschule Wildau (FH)	no	1991	4152	2012/13 (WS)
218	Fachhochschule Brandenburg	No	1992	2920	2012/13 (WS)
219	Hochschule für Technik und Wirtschaft Dresden	No	1992	5272	2012/13 (WS)
220	Hochschule für nachhaltige Entwicklung Eberswalde	No	1992	2033	2012/13 (WS)
221	Europa-Universität Viadrina (Frankfurt (Oder))	Yes	1992	6716	2012/13 (WS)
222	Westfälische Hochschule Gelsenkirchen Bocholt Recklinghausen	no	1992	8357	2012/13 (WS)
223	Staatliche Hochschule für Gestaltung Karlsruhe	yes	1992	446	2012/13 (WS)
224	Hochschule für Technik, Wirtschaft und Kultur Leipzig	no	1992	6277	2012/13 (WS)
225	Fachhochschule der Sächsischen Verwaltung Meißen	no	1992	648	2012/13 (WS)
226	Hochschule Merseburg	no	1992	2727	2012/13 (WS)

227	Hochschule Zittau/Görlitz	no	1992	3342	2012/13 (WS)
228	Westfälische Hochschule Zwickau	no	1992	4880	2012/13 (WS)
229	Fachhochschule Westküste (Heide)	no	1993	1320	2012/13 (WS)
230	Otto-von-Guericke-Universität Magdeburg	yes	1993	13829	2012/13 (WS)
231	Ostbayerische Technische Hochschule Amberg-Weiden	No	1994	3309	2013/14 (WS)
232	Hochschule für Technik und Wirtschaft Berlin	No	1994	13011	2013/14 (WS)
233	Technische Hochschule Deggendorf	No	1994	4771	2012/13 (WS)
234	Universität Erfurt	Yes	1994	5598	2012/13 (WS)
235	Europa-Universität Flensburg	Yes	1994	4662	2012/13 (WS)
236	Thüringer Fachhochschule für öffentliche Verwaltung (Gotha)	no	1994	396	2012/13 (WS)
237	Hochschule Hof	no	1994	3041	2012/13 (WS)
238	Technische Hochschule Ingolstadt	no	1994	4403	2012/13 (WS)
239	Hochschule für angewandte Wissenschaften Neu-Ulm	no	1994	3113	2012/13 (WS)
240	Hochschule für Musik und Theater Rostock	yes	1994	555	2012/13 (WS)
241	Hochschule der Sächsischen Polizei (FH) (Rothenburg/Oberlausitz)	no	1994	374	2012/13 (WS)
242	Hochschule Aschaffenburg	No	1995	2867	2012/13 (WS)
243	Hochschule Bonn-Rhein-Sieg	No	1995	7000	2013/14 (WS)
244	Universität Vechta	yes	1995	3599	2012/13 (WS)
245	Hochschule Ansbach	No	1996	2598	2012/13 (WS)
246	Hochschule Koblenz	no	1996	8110	2012/13 (WS)
247	Hochschule Trier	no	1996	7321	2012/13 (WS)
248	Fachhochschule Polizei Sachsen-Anhalt (Aschersleben)	No	1997	316	2012/13 (WS)
249	Fachhochschule Nordhausen	no	1997	2461	2012/13 (WS)
250	Hochschule für Musik Nürnberg	no	1998	388	2012/13 (WS)
251	Fachhochschule der Polizei (Brandenburg) (Oranienburg)	no	1998	268	2012/13 (WS)
252	Hochschule für öffentliche Verwaltung und Finanzen Ludwigsburg	no	1999	1902	2012/13 (WS)
253	Hochschule der Medien (Stuttgart)	no	2001	4085	2012/13 (WS)
254	Fachhochschule Südwestfalen (Iserlohn)	no	2002	11719	2012/13 (WS)
255	Universität Duisburg-Essen	Yes	2003	39086	2013/14 (WS)

256	Muthesius Kunsthochschule (Kiel)	yes	2005	568	2012/13 (WS)
257	HafenCity Universität Hamburg	yes	2006	2304	2012/13 (WS)
258	Hochschule der Bundesagentur für Arbeit (Mannheim, Schwerin)	no	2006	849	2012/13 (WS)
259	Deutsche Hochschule der Polizei (Münster)	no	2006	228	2012/13 (WS)
260	Norddeutsche Akademie für Finanzen und Steuerrecht (Hamburg)	no	2007	359	2012/13 (WS)
261	Kommunale Hochschule für Verwaltung in Niedersachsen (Hannover)	no	2007	806	2012/13 (WS)
262	Norddeutsche Hochschule für Rechtspflege (Hildesheim)	no	2007	267	2012/13 (WS)
263	Akademie für Darstellende Kunst Baden-Württemberg (Ludwigsburg)	no	2007	55	2013/14 (WS)
264	Hochschule für Gesundheit (Bochum)	No	2009	491	2012/13 (WS)
265	Hochschule Emden/Leer	No	2009	4323	2012/13 (WS)
266	Hochschule Hamm-Lippstadt	no	2009	1829	2012/13 (WS)
267	Hochschule Rhein-Waal (Kleve, Kamp-Lintfort)	no	2009	2614	2012/13 (WS)
268	Hochschule Ruhr West (Mülheim, Bottrop)	no	2009	1762	2012/13 (WS)
269	Duale Hochschule Baden-Württemberg (Stuttgart)	no	2009	34000	2013/14 (WS)
270	Jade Hochschule (Wilhelmshaven, Oldenburg, Elsfleth)	no	2009	6434	2012/13 (WS)
271	Brandenburgische Technische Universität Cottbus-Senftenberg	Yes	2013	10310	2012/13 (WS)
272	Hochschule Geisenheim	Yes	2013	1100	2012/13 (WS)

(Source: Destatis, 2013)

Table 50. Main characteristics of private universities in Germany (listed according to their main location)

Number	Name of the Private University	Right to award Doctorates	Foundation	Number of Students	Year of Status
1	Akkon-Hochschule für Humanwissenschaften (Berlin)	no	0	118	2012/13 (WS)
2	ESMOD Internationale Kunsthochschule für Mode (Berlin)	yes	0	155	2012/13 (WS)
3	Fachhochschule für Sport & Management Potsdam*	no	0	119	2012/13 (WS)
4	Technische Fachhochschule Georg Agricola (Bochum)	no	1816	2178	2012/13 (WS)
5	Hochschule Fresenius (Idstein)	no	1848	5708	2012/13 (WS)
6	Handelshochschule Leipzig	yes	1898	434	2012/13 (WS)
7	Merz Akademie (Stuttgart)	no	1918	250	2012/13 (WS)
8	Leibniz-Akademie Hannover (Hannover)	no	1920	311	2012/13 (WS)
9	Ukrainische Freie Universität München	yes	1921	149	2007 (SS)
10	Freie Hochschule Stuttgart	no	1928	300	2012/13 (WS)
11	Naturwissenschaftlich-Technische Akademie Isny	no	1945	194	2012/13 (WS)
12	Frankfurt School of Finance & Management (Frankfurt am Main)	yes	1957	1278	2012/13 (WS)
13	AKAD Bildungsgesellschaft (Stuttgart)	no	1959	5207	2012/13 (WS)
14	Hochschule für Künste im Sozialen Ottersberg	no	1967	431	2012/13 (WS)
15	Fachhochschule Wedel	no	1969	957	2012/13 (WS)
16	Hochschule 21 (Buxtehude)	no	1971	714	2012/13 (WS)
17	EBS Universität für Wirtschaft und Recht (Wiesbaden, Oestrich-Winkel)	yes	1971	1791	2012/13 (WS)
18	Rheinische Fachhochschule Köln	no	1971	4742	2012/2013 (WS)
19	SRH Hochschule für Wirtschaft und Medien Calw	no	1972	299	2012/13 (WS)
20	SRH Hochschule Heidelberg	no	1972	2769	2012/13 (WS)
21	ESCP Europe Campus Berlin	yes	1973	173	2012/13 (WS)
22	Universität Witten/Herdecke	yes	1982	1444	2012/13 (WS)
23	WHU – Otto Beisheim School of Management (Vallendar)	yes	1984	932	2012/13 (WS)
24	Hochschule für Kunsttherapie Nürtingen	no	1987	289	2012/13 (WS)
25	accadis Hochschule Bad Homburg*	no	1990	553	2012/13 (WS)
26	International School of Management (Dortmund)	no	1990	1560	2012/13 (WS)
27	Hochschule für Telekommunikation Leipzig	no	1991	1004	2012/13 (WS)
28	Munich Business School (München)	no	1991	518	2012/13 (WS)
29	Nordakademie (Elmshorn)	no	1992	1327	2012/13 (WS)
30	Fachhochschule der Wirtschaft (Paderborn)	no	1992	1874	2012/13 (WS)
31	FOM Hochschule (Essen)	yes	1993	21263	2012/13 (WS)
32	Cologne Business School (Köln)	no	1993	1123	2012/13 (WS)
33	Diploma Hochschule (Bad Sooden-Allendorf)	no	1994	3499	2012/13 (WS)

34	Private Fachhochschule Göttingen	no	1994	2013	2012/13 (WS)
35	Hochschule für Gesetzliche Unfallversicherung (Bad Hersfeld)	no	1996	151	2012/13 (WS)
36	Fachhochschule für die Wirtschaft (Hannover)	no	1996	473	2012/13 (WS)
37	Wissenschaftliche Hochschule Lahr	no	1996	417	2012/13 (WS)
38	SRH Fernhochschule Riedlingen	no	1996	1966	2012/13 (WS)
39	Dekra Hochschule Berlin	no	1997	332	2012/13 (WS)
40	HFH Hamburger Fern-Hochschule	no	1997	9383	2012/13 (WS)
41	Wilhelm Büchner Hochschule (Pfungstadt)	no	1997	5804	2012/13 (WS)
42	Internationale Hochschule Bad Honnef · Bonn	no	1998	1844	2012/13 (WS)
43	Steinbeis-Hochschule Berlin	yes	1998	5663	2012/13 (WS)
44	Fachhochschule für Wirtschaft und Technik Vechta/Diepholz/Oldenburg	no	1998	700	2012/13 (WS)
45	ECLA of Bard, a Liberal Arts University in Berlin	no	1999	0	0
46	Jacobs University Bremen	yes	1999	1312	2012/13 (WS)
47	Fachhochschule des Mittelstands (Bielefeld)	no	2000	1584	2012/13 (WS)
48	Bucerius Law School (Hamburg)	yes	2000	958	2012/2013 (WS)
49	Business and Information Technology School (Iserlohn/Hamburg)	no	2000	1271	2012/13 (WS)
50	Europäische Fachhochschule (Brühl)	no	2001	1599	2012/13 (WS)
51	Alanus Hochschule für Kunst und Gesellschaft (Alfter)	yes	2002	914	2012/13 (WS)
52	ESMT European School of Management and Technology (Berlin)	yes	2002	233	2013/14 (WS)
53	SRH Hochschule Berlin	no	2002	518	2012/13 (WS)
54	Provdadis School of International Management and Technology (Frankfurt am Main)	no	2002	897	2012/13 (WS)
55	Deutsche Hochschule für Prävention und Gesundheitsmanagement(Saarbrücken)	no	2002	3421	2012/13 (WS)
56	Hertie School of Governance (Berlin)	yes	2003	293	2012/13 (WS)
57	Touro College Berlin	no	2003	122	2012/13 (WS)
58	Hochschule der Sparkassen-Finanzgruppe (Bonn)	no	2003	919	2012/13 (WS)
59	Dresden International University	no	2003	1377	2012/13 (WS)
60	Europäische Fernhochschule Hamburg	no	2003	5627	2012/13 (WS)
61	Popakademie Baden-Württemberg (Mannheim)	no	2003	250	2011
62	Zeppelin Universität (Friedrichshafen)	yes	2003	805	2012/13 (WS)
63	Mediadesign Hochschule (Berlin)	no	2004	1279	2012/13 (WS)
64	Hochschule für angewandtes Management (Erding)	no	2004	2201	2012/13 (WS)
65	Hamburg School of Business Administration	no	2004	731	2012/13 (WS)
66	SRH Hochschule für Logistik und Wirtschaft Hamm	no	2004	495	2012/13 (WS)
67	Baltic College (Schwerin)	no	2004	169	2012/13 (WS)
68	Karlshochschule International University (Karlsruhe)	no	2004	636	2012/13 (WS)
69	Apollon Hochschule der Gesundheitswirtschaft (Bremen)	no	2005	1242	2012/13 (WS)

70	AMD Akademie Mode & Design (Hamburg)	no	2005	1051	2012/13 (WS)
71	German Graduate School of Management and Law (Heilbronn)	no	2005	128	2012/13 (WS)
72	Berliner Technische Kunsthochschule	no	2006	368	2012/13 (WS)
73	SRH Fachhochschule für Gesundheit Gera	no	2006	486	2012/13 (WS)
74	International Business School of Service Management (Hamburg)	no	2006	74	2012/13 (WS)
75	Hochschule für Angewandte Sprachen München	no	2006	371	2012/13 (WS)
76	bbw Hochschule (Berlin)	no	2007	1045	2012/13 (WS)
77	BEST-Sabel-Hochschule Berlin	no	2007	102	2012/13 (WS)
78	design akademie berlin, Hochschule für Kommunikation und Design (FH)(Berlin)	no	2007	295	2012/13 (WS)
79	H:G Hochschule für Gesundheit und Sport (Berlin)	no	2007	888	2012/13 (WS)
80	IB-Hochschule Berlin	no	2007	518	2012/13 (WS)
81	Macromedia Hochschule für Medien und Kommunikation (München)	no	2007	2008	2012/13 (WS)
82	Deutsche Universität für Weiterbildung	no	2008	212	2012/13 (WS)
83	Hochschule für Medien, Kommunikation und Wirtschaft (Berlin)	no	2008	334	2012/13 (WS)
84	EBZ Business School (Bochum)	no	2008	569	2012/13 (WS)
85	Adam-Ries-Fachhochschule (Erfurt)	no	2008	442	2012/13 (WS)
86	EBC Hochschule Hamburg	no	2008	873	2012/13 (WS)
87	BSP Business School Berlin Potsdam	no	2009	346	2012/13 (WS)
88	Hochschule der populären Künste FH	no	2009	269	2012/13 (WS)
89	International Psychoanalytic University Berlin	no	2009	395	2012/13 (WS)
90	Quadriga Hochschule Berlin	no	2009	75	2012/13 (WS)
91	Hochschule für internationale Wirtschaft und Logistik (Bremen)	no	2009	68	2012/13 (WS)
92	MSH Medical School Hamburg	no	2009	722	2012/13 (WS)
93	CVJM-Hochschule (Kassel)	no	2009	297	2012/13 (WS)
94	Hochschule Neuss für Internationale Wirtschaft	no	2009	177	2012/13 (WS)
95	Mathias Hochschule Rheine	no	2009	255	2012/13 (WS)
96	Psychologische Hochschule Berlin	no	2010	53	2012/13 (WS)
97	Fachhochschule Dresden	no	2010	113	2012/13 (WS)
98	Hochschule für Kunst, Design und Populäre Musik Freiburg	no	2010	111	2012/13 (WS)
99	Brand Academy – Hochschule für Design und Kommunikation (Hamburg)	no	2010	90	2012/13 (WS)
100	Kühne Logistics University (Hamburg)	no	2010	109	2012/13 (WS)
101	Hochschule Weserbergland (Hamel)en	no	2010	383	2012/13 (WS)
102	Hochschule der Wirtschaft für Management Mannheim	no	2010	238	2012/13 (WS)
103	Hochschule für Wirtschaft, Technik und Kultur Berlin (HWTk)	no	2011	106	2012/13 (WS)
104	German open Business School (Berlin)	no	2011	444	2012/13 (WS)
105	Flidner Fachhochschule Düsseldorf	no	2011	268	2012/13 (WS)
106	DPFA Hochschule Sachsen (Zwickau)	no	2012	27	2012/13 (WS)

107	Wilhelm Löhe Hochschule für angewandte Wissenschaften (Fürth)	no	2012	18	2012/13 (WS)
108	IST-Hochschule für Management (Düsseldorf)	no	2013	56	2013 (SS)
109	VWA Hochschule für berufsbegleitendes Studium Stuttgart	no	2013	160	2013/14 (WS)
110	Medizinische Hochschule Brandenburg	yes	2014	0	0

*The highlighted universities are private universities which offer business and management subjects

(Source: Destatis, 2013)

Appendix 2: Number of Students in the Bachelor Programme “Business Administration” in the Summer Semester 2015 at the University of Hamburg



Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

UHH · Fakultät BWL · Studienbüro BWL · Von-Melle-Park 5 · 20146 Hamburg

Herrn
Stephan Platz

Von Melle Park 5
20146 Hamburg
Raum 2018

18.05.2016
LS

FAKULTÄT
FÜR BETRIEBSWIRTSCHAFT
HBS Hamburg Business School

Lilija Schmidt, Dipl. Mathematikerin/
Dipl. Wirtschaftsmathematikerin

Fakultät für Betriebswirtschaft
Studienkoordinatorin/Studienfachberaterin
Studienbüro BWL
Von-Melle-Park 5
Raum C0006
20146 Hamburg

Tel. +49 40 42838-4069
Fax +49 40 42838-9728
studienbuero.bwl@uni-hamburg.de
www.bwl.uni-hamburg.de

Studierendenzahl im Sommersemester 15

Sehr geehrter Herr Platz,

laut STINE (die Abfrage erfolgte am 11.05.2016) waren 1119 Studierende im Studiengang BWL Bachelor im Sommersemester 15 eingeschrieben.

Mit freundlichen Grüßen


Lilija Schmidt

Appendix 3: Quantitative Questionnaire Distributed to Students at the University of Hamburg and a Private University in Hamburg, Germany

The intention of the survey is to analyse the expectations of students about their higher education institution and to point out their effectively positive and negative experience with the institution. The questionnaire is voluntary and the data collected is strictly confidential. No participant will be identified. In case you have any questions or suggestions, please contact Stephan Platz (steph.platz@web.de).

1. At which higher education institution are you studying?

Please put yourself in the situation as you made the decision for your higher education institution. How important were the following factors for your decision at that time?

	Not important at all			very important	
	1	2	3	4	5
1. Image of the institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Academic reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Research reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. University fair-positive impression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Recommended by friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Ranking of the institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Reputation of the professors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Fluctuation rate of lecturers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Employability after graduation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Close links to companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Very good facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other important factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14.

2. How do you rate the following criteria from today's perspective?

	Not important at all				very important
	1	2	3	4	5
15. Image of the institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Academic reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Research reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. University fair-positive impression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Recommended by friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Ranking of the institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Reputation of the professors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Fluctuation rate of lecturers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Employability after graduation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Close links to companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Very good facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Other important factors					

27. _____

3. Personal demographic criteria

28. Age :

29. Sex:

30. Grade of A-Level

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4

31. Has one or both of your parents an academic background?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No	Yes, one	Yes, both

Employment status of you parents:

32. **Father**

Public servant	<input type="checkbox"/>
Company employee	<input type="checkbox"/>
Labour	<input type="checkbox"/>
Free-lancer	<input type="checkbox"/>

33. **Mother**

Public servant	<input type="checkbox"/>
Company employee	<input type="checkbox"/>
Labour	<input type="checkbox"/>
Free lancer	<input type="checkbox"/>

Medic	<input type="checkbox"/>	Medic	<input type="checkbox"/>
House husband	<input type="checkbox"/>	Housewife	<input type="checkbox"/>
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>

34. In which city have you completed your A-levels?: _____

35. How many inhabitants have the city where you did your A-levels?

☐ 10.000
☐ 100.000
☐ 1.000.000
☐ 1.000.000

36. Have you finished your A-Levels at a private or state school?

☐ Private school
☐ State school

37. Have your sister or brother studied at a private higher education institution?

☐ Yes ☐ NO

38. Have you got working experience? If yes, please state your experience in months!

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Apprenticeship	_____ (in months)
No	Yes	<input type="checkbox"/> Internship	_____ (in months)
		<input type="checkbox"/> Holiday job	_____ (in months)
		<input type="checkbox"/> Other	_____ (in months)

39. Nationality:

☐ German ☐ Other Nationality:

Appendix 4: Interview Guide of the Expert Interviews

Interview typ: semi-structured Interview

Content: interview orientates on the questionnaire

Name of the expert:.....

Profession:.....

Email:.....

Own experiences with state and private higher education institution:.....

1. What are for you the important criteria in the decision process of students for a Business School?
2. How do you evaluate the importance of the listed variables about the decision process of students in the questionnaire?
3. Which type of student study at private Business Schools? Please justify your answer by your own experiences with private University or Business Schools.
 - a. Age
 - b. Sex
 - c. Social background
 - i. Parents
 - ii. Siblings
 - iii. Friends
 - d. Is the previous school important
 - i. State school
 - ii. Private school
 - e. Nationality
4. How constitutes private Business Schools success?

- a. What are the criteria
 - b. How would it be possible to evaluate success?
 - c. Which instruments helps to measure and evaluate success?
- 5. Which instruments are from your point of view promising to gain students for a Business School?
 - a. Please give examples
 - b. Which marketing strategies are important?
- 6. Which instruments are from your point of view promising to retain students at a Business School?

Appendix 5: Transcription of the Expert Interview of Dr. Daniela Lobin

Dr. Lobin was for a long time employed a private Business School in Dortmund. She worked there as Head of Marketing and Communication and was closely linked with the students recruitment center.

Answer of Dr. Lobin to question number one: What are for you the important criteria in the decision process of students for a private Business School?

Dr. Lobin pointed out that most of the business students want to work later in that field and have chosen the private university because of their increased chances through the network etc. of the institution. Dr. Lobin worked closely with students who studied international business. As important criteria in the decision process for a private University highlighted Dr. Lobin the crowded state universities. In addition, the small classes and the individual assistance/mentoring of students are very significant criteria aspects by selecting a private university. Another important criterion in the decision process is the international orientation of the private universities. Students want to combine their studies with semester's abroad studies.

The private university where Dr. Lobin worked offers students two semesters abroad, a large number of partner universities worldwide and extra language training. Good education, professional content of the lectures combined with semester's abroad periods is significant for students to choose a private University. Furthermore, is the integration of practice orientation an important objective of private universities and students have to make compulsory internships in companies. One has to be in a foreign country and one has to be in Germany. The link between practice and education is another important point for choosing a private institution. Because, most of the state universities have the problem that after the official lecture period the students start with their exams period and have often no time to do an internship. That implicates that some state university students have no work experience after their graduation. Because of that private universities have an advantage. They combine Practical experience with education and internationality. A further reason and criterion is that some students have not the chance to study their degree programme at a state school. State Universities limit the access to some degree programmes such as journalism, medicine or law. Private universities try to recruit those students to their institution and offer them similar degree programmes without limited access.

Answer of Dr. Lobin to question number two: How do you evaluate the importance of the listed variables about the decision process of students in the questionnaire?

The variable image plays a significant role. The variable image is strongly affected by the alumni of the business school and the current students of the institution. However, is the academic staff another important aspect for the image of an institution. How academic staff speak in public about the institution have an effect on the image. Furthermore, is the image of a private university an important factor for human resource manager. If for example human resource manager would send their own children to the institution the image of the institution will increase. Another important aspect is the academic reputation. Academic reputation means the reputation of the academics of an institution. How good is the academic staff and how good present they their knowledge to students? Their selection of academic staff was always influenced by personal recommendation. The academic reputation was closely related to the research reputation. Research reputation played a less important role at the private university. That private institutions was not looking for researchers as for experienced managers who had the ability to deliver good quality teaching combined with practical experiences.

Furthermore, an interesting variable is the criterion university fair. The education fairs are often a good marketing instrument which is just efficient with a combination of students and alumni onsite on the university fair stand. To speak with current and former students about degree programmes will be for future students an important aspect. In addition, it will be important that the fair stand looks similar to the branding and image of the institution. It will be absolute necessary to place staff members which have in depth knowledge about the study programmes at the fair stand. However, their professors have been used more in in-house activities as on university fairs. Important is that university fairs are just in a combination with other marketing strategies effective. In order to attract students for an institution are many contact points necessary.

One variable could be the recommendation by friends. The recommendation by siblings and alumni can play an important aspect within the decision process for or against an private institution. The criterion ranking of an institution plays a different role. The ranking depends often on the target group and the degree programme. Students are more orientating on aspects such as how many practical experience (internships) are offered and how international is the programme. By/through rankings higher education institutions try to fulfill the requirements of

their target groups. However, are rankings a very good communication tool which helps to give the institution a positive/better image. A relevant aspect is the state recognition for private higher education institution. Without such recognition it will be very difficult to recruit students for the institution. In contrary, it is also important that the professors have a good reputation. For private institution it is required that professors have intensive experience outside the university. The previous jobs and employees of the professor get listed and communicate by the private universities. Private institutions administer the practical experiences of their staff and use the professors' recommendation for the recruiting process. Interesting is the answer of Dr. Lobin that the criterion fluctuation rate plays a minor role within the recruiting process. It will be important that the new employed staff have similar expertise and deliver the knowledge in a good way.

Dr. Lobin highlighted that the variable employability is the most important. Parents and as well the students of private higher education institution invest a huge amount of money in the education and because of that expect a reinvestment in form of a good job place after graduation. Therefore, it will be necessary for private higher education institution to establish close links to companies where students get in touch with their future employer. On the other side, it will be important that the students use the network platform of the higher education institution by themselves. To be pro-active and to do different internships within the study programme helps to establish possible future job contacts. That private higher education institutions have very good facilities such as computer labs, rooms, chairs etc. is natural for students at a private institution. Students choose a private institution because of a better atmosphere and expect friendly and helpful staff.

Dr. Lobin highlighted that the two most important aspects for private higher education institutions are the close link to companies and the connection to the alumni. Alumni are the best advertising media for the private higher education institution. To point out the jobs of alumni and to establish close links to them can help to place current students in internship programmes or maybe future permanent position in the company. But to maintain the alumni network is not easy. Another important aspect within the recruiting process was pointed out by Dr. Lobin. To build regional campuses of the higher education institution helps to increase student numbers. Most of the students are unwilling to move for their studies. They would like to study in their region or city. Because of that private higher education institution build multi-branches of their institution in North, South, West and East Germany.

Answer of Dr. Lobin to question number three: Which type of student study at private Business Schools? Please justify your answer by your own experiences with private University or Business Schools.

Bachelor students have been mostly recruited after school graduation. Just a few students did an apprenticeship before. Furthermore, gender influences the decision process of the degree programme. Dr. Lobin mentioned that for example the Bachelor in Tourism Management was often chosen by female students. In contrary, male students have chosen bachelor programmes in finance. The social background plays also a role but not such an important. Bachelor students have parents from different professional backgrounds. Next to academics such as medicals, free-lancer, managers or lawyers also workers send their children to that private institution where she worked for. However, most children come from parents with educational background. The previous school (private or state) plays not an important role. Parents of different social backgrounds are willing to pay for the education of their children. Some parents take out a loan to finance the education for their children. The willingness to pay for education increased in the last years in Germany.

The Bachelor programmes are mostly just interesting for German students. Just a few foreign students studied a bachelor programme at the private institution where Dr. Lobin worked for. The reason is that most of the bachelor programmes are taught in German language with an international aspect. But the language of instruction is German. Acquisition of bachelor students will make therefore just sense with bachelor programmes taught in English language. On the other side, most of the master programmes are taught in English language and most of the postgraduate students finance their study by themselves. Some students are lucky because their master programme will be financed by their employer. Dr. Lobin mentioned that the financial investment will be high to launch master programmes and because of that it is difficult to offer them. One reason will be to recruit native English speaking professors and lecturers.

Answer of Dr. Lobin to question number four: How constitutes private business schools success?

Dr. Lobin pointed out that rankings play an important role to constitute a business school. Another significant aspect is the relevant accreditations. What are the requirements for the

study programmes? Accreditations such as the FIBAA (accreditation of the programmes) and the Wissenschaftsrat (accreditation of the institution) are very important for private higher education institutions. Furthermore, are the most important aspects to constitute the institution by the evaluation of the degree programmes, of the lecturers and about the satisfaction of the students. Nevertheless, it is important to point out that satisfaction of the students does not implicate a maximum of good education. Evaluation and enquiries are instruments to measure success.

Answer of Dr. Lobin to question number five: Which instruments are from your point of view promising to gain students for a Business School?

Dr. Lobin mentioned that the most important instrument is the product! A good degree programme which exactly concentrates on the relevant target group will be the best instrument. Furthermore, a very good internet presence, linked with Google ads and contact opportunities for interested students are essential instruments. Nevertheless, high-quality brochures are still important. The brochures have to show and underline the employability after graduation. By interviewing alumni, current students or company managers about the advantages of the degree program at that institution are important aspects by recruiting interested students. If for example employability of students is one of the main topics will it be important to highlight the success of alumni! Furthermore, it will be important to highlight the internationality of the institution by pointing out the cooperation universities or student stories in the brochure. Rather negative are print advertisement in fair magazines. However, are university fairs a not unimportant tool to recruit students. But it will be absolute necessary that competent employees inform students about their different degree opportunities. The have to show and explain interested student what they can achieve with that degree programme.

Dr. Lobin sees social media not as such an important tool to recruit students. It will be more important to update students and interested students about university highlights etc. To invite students to test a degree programme for a week are marketing strategies' to get students interested for the institution. As important student and university contact points t are university fairs followed by open days (in-house) activities followed by contacts with alumni and test week at the institution.

Summary of important aspects and criteria mentioned in the expert interview with Dr. Lobin:

Dr. Lobin emphasised that most of the students at private universities have chosen the institution because of the network and the belief of a good job after graduation. Furthermore, are small classes and intensive mentoring other important criteria for a private institution. Also the international orientation and partnerships of most private universities supports the recruiting process. Nevertheless, are the applied research lessons and the close links to companies other important aspects in the decision process of students. Because of that, a positive and well known image will be the key aspect of the private institution. Academic staff who deliver good knowledge but also work in the business world are criteria to strengthen the image of a private institution. To combine scientific education with practical experience is a strong criteria for the decision for a private university.

Dr. Lobin pointed out that rankings are not so important and that interested students often look for the university partnerships with companies. Academic staff have to made extensive work experiences outside the university. Without comprehensive work experience academic staff will be not employed at private universities. Employability of the students after their graduation is the strongest success factor and proving quality of a private university. Therefore, are alumni networks and programmes helpful to facilitate and support the decision process of interested students. To speak with alumni about their experiences with the institution and their career pathway are strong marketing instruments for a private university. Dr. Lobin pointed out that nowadays the social background plays not so an important role by choosing a private university. Parents from different social backgrounds want to enable their children a good education. Dr. Lobin mentioned that bachelor programmes are just interesting for students who speak German.

A more international approach for bachelor programmes was recommended by Dr. Lobin. Bachelor programmes taught in English language are recommended to recruit more international students. However, a problem will be firstly to find academic staff to deliver good quality teaching in English language. Another critical point will be the increase of wages for multilingual lecturers. Dr. Lobin argued that evaluations of the academic staff, career centre and for example the international office are possible instruments to measure success and quality of a private university. The most important marketing instruments are glossary brochures with

success stories of students/alumni, in house activities and test weeks for interested students. Less important to recruit students are social media activities or university fairs. But both instruments are important to get or stay in contact with interested students (contact points).

Appendix 6: Transcription of the Expert Interview of Prof. Dr. Dirk Holtbrügge

Prof. Dr. Holtbrügge was for a long time employed at a private business school in Dortmund. Currently, Prof. Dr. Holtbrügge is the Head of the International Management Department at the Business and Economics School, Friedrich-Alexander-University of Erlangen-Nürnberg (State University), Germany.

Answer of Prof. Dr. Holtbrügge to question number one: What are for you the important criteria in the decision process of students for a private Business School?

Professor Dr. Holtbrügge pointed out that 70 % of the students at state universities have chosen their institution because of the location. Most of the students look at state universities near their home. The other 30 % choose the state university because of a good ranking or reputation. Just under 10 % of the 30 % of the students have chosen the institution because of their A-level grade. Their weak A-level grade disallows them to have a broader choice of state universities. In contrary, students in the postgraduate master degree programmes choose the state university because of the master degree programme.

Answer of Prof. Dr. Holtbrügge to question number two: How do you evaluate the importance of the listed variables about the decision process of students in the questionnaire?

Prof. Dr. Holtbrügge referred to the variable image and the importance of the variable. He mentioned that there are no clear criteria for a good or weak university in Germany. He brought up the university rankings but argued that these rankings have to be seen very critical. These rankings are very sensible adverse changes within the institution. Often depends the ranking on staff members (Professors/Lecturers) and their academic and research engagement. Therefore, sees Prof. Dr. Holtbrügge university rankings as a non-valid indicator. Prof. Dr. Holtbrügge pointed out that the evaluations of the current students are much more important than rankings. To ask questions about “how good the students mentoring of the university is and how the relationship between professors and students are”, are much more important than rankings. However, the problem is that just a small number of students answer those questions. Most of the students use such a platform to criticise the university and not to point out positive aspects.

One of the most important criteria is the employability of the students after graduation. Also state universities use that variable more and more as marketing instrument. The state university where Prof. Dr. Holtbrügge works for uses a hall of fame to show current and interested students successful alumni. It will increase to highlight successful alumni and good relationships to companies. Nevertheless, Prof. Dr. Holtbrügge pointed out that state universities and private universities in the USA use such a marketing tool more intensive by showing interested student possible starting salaries for graduates. Furthermore, he highlighted that the variable employability have a strong relation with the variable close links to companies. In addition, Prof. Dr. Holtbrügge mentioned that some bachelor students but also the parents implicate with close links to companies a direct job placement for good students. Such a way of thinking is naive and has to be denied straightly in meeting with students. On the other side, close links to companies support to increase contacts to human resource managers of companies and to invite them for lectures or speeches. Also helps a close link to companies to invite managers into lectures where they can speak about their jobs, a specific topic or the requirements on graduates.

Prof. Dr. Holtbrügge said that the criteria/variables are different at private higher education institutions. The most significant criteria for students of choosing a private institution are the aspect of the conditions of admission. How are the entry barriers of the private institution? How has the student to perform to get a study place at the institution?

However, pointed Prof. Dr. Holtbrügge out that a few private universities have high entry barriers and not allow every student to study at their institution. A distinction must be drawn between well respected private universities and the other private institutions. Prof. Dr. Holtbrügge sees a close link between the variable image and the variable good facilities at private institutions. Most of the students expect very good facilities at private institutions and use such variable as aspect for an institution. Another relevant aspect of private higher education institution is the fluctuation rate of the professors. Most of the professors who get an offer of a state university will leave the private institution. The reasons are financial safety and better wages. In contrary, in other countries such as France or the USA professors try to work for private universities. Nevertheless, Prof. Dr. Holtbrügge mentioned that the number of private higher education increased in Germany and that it is very difficult to maintain an overview about good or weak private higher education institutions.

Answer of Prof. Dr. Holtbrügge to question number three: Which type of student study at private Business Schools? Please justify your answer by your own experiences with private University or Business Schools.

As mentioned above are the entry barriers the most important criterion to study at a private university. Students who not passed the entry regulations/requirements of a state university use the chance to study their chosen degree programme at a private university. Reasons for the choice of a private university are small classes and the better mentoring/motivation of students at private universities. Students have to be more tough and have to be an individual fighter in a very huge state university atmosphere. Furthermore, is the majority of private university students from wealthy families. Especially important for such a target group are excursions on a regular basis, interesting guest lecturers and a broad network. More and more gets the variable nationality important. Prof. Dr. Holtbrügge suggested that private universities are getting more and more interesting for students from Asia. Firstly, are the master programmes for future Asian students interesting. But nevertheless, getting English taught bachelor programmes in the focus of Asian students. Private universities have the advantage that they intensively mentor and support foreign students. They see them more as customers and the degree programme as a good service with a good product in the end.

Answer of Prof. Dr. Holtbrügge to question number four: How constitutes private Business Schools success?

Prof. Dr. Holtbrügge mentioned that the fundamental aspect will be the academic quality of an institution. He pointed out that his university invests 90 % of the resources in the quality of the education and training of the students. However, is the variable employability after graduation and the recognition of the importance of entry the employment market less distinct at state universities. In contrary, private universities have a strong orientation on the above mentioned variables. Career center of private institutions supports students by job interviews, by applications or by internships. Also mentioned Prof. Dr. Holtbrügge that private universities invests more in competent staff which work in the administration. Most of them have a university degree and speak different languages. However, will be the success of a private university measured or evaluated by their alumni and their current career. It is important to point out that a good private university success will be not evaluated on their promises to the students! Another important aspect which constitutes success of a private institution is the aspect

of fun. Students at state universities have often no fun. Unfriendly professors or staff and crowded lecturers are problems for students at state universities. Private universities try to offer students a mixture of scientific lecturers combined with excursions etc. Lectures which have not the highest scientific standard often motivate more students to get involved. They are not too afraid to speak about their opinion or their solutions for a problem. The service quality is much higher at private universities. The mentoring of students is one of the key aspects of private universities. Evaluations and accreditations are requirements and because of that natural for a good private institution. Prof. Dr. Holtbrügge pointed out that for example a FIBAA certificate will be not an indicator for good service quality. On the other side, are getting international accreditations much more important. Because of a globalised world, students not just from Asia want to study in Germany. Also students from North-America or European countries want to study in Germany and look for criteria such as international accreditations of the private university.

Answer of Prof. Dr. Holtbrügge to question number five: Which instruments are from your point of view promising to gain students for a Business School?

Prof. Dr. Holtbrügge mentioned that good marketing instruments for private and state universities are visits and lectures in schools. To inform pupils about degree programmes and possible job prospective can be an efficient marketing tool. Open days are other marketing tools to get in contact with interested students and their parents. Prof Dr. Holtbrügge pointed out that he cannot evaluate the effectiveness of print media for example in buses or trains. He mentioned that too much advertisement in buses or trains can be also seemed daunting. Education is seen as an elitist privilege in Germany.

Answer of Prof. Dr. Holtbrügge to question number six: Which instruments are from your point of view promising to retain students at a Business School?

An important aspect to keep students at private and state universities is to fulfill the student expectations on the institution and degree programmes. Prof. Dr. Holtbrügge pointed out that for private universities it will be much more difficult to fulfill the expectations of the students. Students at private university have a high level on expectations. This is mainly because private universities do a lot of promises to recruit students. Also students ask themselves if their degree programme at a private university helps them to gain a good workplace. Are the tuition

fees a good investment? Problems at private institutions are the high fluctuation rate of lecturers. Most of them are free-lancer and have no contact to other colleagues. Lectures are not coordinated with other lecturers and their teaching content. The best possible factor to keep students at a private or state university is to have a good academic programme, good lecturer and to show students their career perspective.

Summary of important aspects and criteria mentioned in the expert interview with Prof. Dr. Holtbrügge:

Prof. Dr. Holtbrügge highlighted that most of the students choose their higher education institution because of the location. Students want to study nearby their parent's home or away from parents home. Some students have to choose a university because of their weak A-levels. In contrary, some students choose because of their good A-levels well known universities as a study option. Prof. Dr. Holtbrügge pointed out that the most of the students start choosing a specific university for their master degree. Also Prof. Dr. Holtbrügge argued that rankings are not a valid-indicator within the decision process of students. The employability and the relationship between professors and students are important criteria for the decision process for or against a university. Prof. Dr. Holtbrügge mentioned that both state and private universities have to put forward more their alumni and their career achievements. Negative aspects of private institution are the high fluctuation rate of professors and lecturers as well as the academic standards of the assessment test. Most of the students get a study offer and just a few private universities are selecting their students. Furthermore, are most of the students at private universities students who not passed the requirements at a state university. Some of the students need small classes, motivation by lecturers and specific mentoring programmes to achieve a bachelor degree.

On the other side, bachelor programmes taught in English language are getting more and more interesting for overseas and European students. Students have to pay tuition fees in most countries and are used to that system. German private universities have the advantage that they care more about their students and that the tuition fees compared to other foreign private universities are reasonably affordable. Furthermore, private universities try to attract students with internships or student jobs to finance their study. As fundamental aspects to constitute the success of a higher education institution are the academic quality and the career pathways of the alumni. Significant questions are how employable the students are? Was the quality of

the education good and are the students good prepared for the job world? Institutional accreditations just as FIBAA or the German Wissenschaftsrat are possible indicators for good quality teaching, good facilities and employability after graduation. However, are those accreditations just a reference and not a guarantee for employability.

Prof. Dr. Holtbrügge pointed out that school visits and test lectures of professors at schools are good marketing instruments. To inform interested students in depth about the programme, possible career pathways and the network of the institution is a tool which supports the decision process of pupils. The intensive advertisement of some private universities in print media or buses etc. was criticised by Prof. Dr. Holtbrügge. Too much advertisement shows that anybody can study at that institution. Prof. Dr. Holtbrügge pointed out that higher education institutions have to close the gap between expectations and experiences of students. To inform students more in depth about the positive but as well as the negative aspects of a study programme helps to keep students at private universities. To point out the positive aspects (employability, close links to companies, career centre, and international office) of a private universities helps students to see their tuition fees as an investment and not as fraud. But it will be important that private universities will realise the above mentioned points.

Appendix 7: Transcription of the Expert Interview of Prof. Dr. Nicola Berg

Prof. Dr. Berg was for a long time employed at a private business school in Dortmund. Currently, Prof. Dr. Berg is the Chair of the Strategic Management department at the University of Hamburg (state University).

Answer of Prof. Dr. Berg to question number one: What are for you the important criteria in the decision process of students for a private Business School?

Prof. Dr. Berg pointed out that the most important criterion for students who want to study at a state University is the aspect “close to the parents’ home or in contrary the distance to parents home”. Furthermore, have different state universities a strong reputation for business studies, medicine, law or other subjects. Prof. Dr. Berg mentioned that university rankings play more and more an important role within the decision making process of students. Prof. Dr. Berg questioned if students are able to evaluate the rankings and if the state university is good or weak. Prof. Dr. Berg distinguished that the most important criterion for students to choose a private university is the aspect image. It is more a decision process for a status symbol to study at a private university. The advertising and promotional materials (glossy brochure) have a strong influence of the decision process.

Answer of Prof. Dr. Berg to question number two: How do you evaluate the importance of the listed variables about the decision process of students in the questionnaire?

Prof. Dr. Berg referred to the variable image of an institution and pointed out that the criterion image plays not an important role at state universities in Germany. Factors such as the location of the institution, nearby parents’ home or away from parents home are much more important. An example are the crowded state universities in West Germany and the remains modest state universities in East Germany. Most of the state universities in East Germany have better facilities than the state universities in West Germany, but have fewer students. Furthermore, Prof. Dr. Berg revealed to the criteria academic reputation and research reputation. Both variables are more important aspects for postgraduate students within the decision process for a master programme. Bachelor students find those criteria regardless. An important role play university fairs for private universities. They recruit future students at educational fairs. State universities have not so much pressure to recruit students on university fairs.

They have enough financial support of the government, sufficient interested students and not rely on students tuition fees.

A criterion such as the recommendation of an institution by friends is closely related to the family (parents) and friends of the family. The criterion is important, but depends on the study subject. In addition, the variable ranking gets more and more important at state but as well at private universities. However, are university rankings more interesting and important for master students than undergraduates. Closely linked with the variable ranking is the reputation of the professors. However, that variable is more essential for master than for bachelor students. The variable fluctuation rate of staff plays a minor part at state university. In contrary, students at private universities find it distracting and dubious if the fluctuation rate of academic staff will be high. Consequences can be a bad spirit and atmosphere at the private university. Students lose interest and the institution has the risk of a bad reputation by students. Another important variable for private university is the employability for students after graduation. Alumni are the best advertisement for a private university. State universities have not such an intensive focus on the variable employability and their alumni. State universities are not commercialising the topic. However, Prof. Dr. Berg pointed out that the criteria employability after graduation and close links to companies have to be more highlighted by state universities. State universities have to bring up that students write their Bachelor thesis often together with companies or work as temporary student employee. Private universities use those topics much better as marketing tool and as unique feature. Also are the facilities good at state universities compared to private universities. Prof. Dr. Berg argued that private universities cannot have such good libraries as state universities. Furthermore, are the facilities not so important for bachelor students. The major distinction between state and private university is the aspect that private university market them more effectively.

Answer of Prof. Dr. Berg to question number three: How do you evaluate the importance of the listed variables about the decision process of students in the questionnaire?

Prof. Dr. Berg. mentioned that private university students are mostly from wealthy families who can afford the tuition fees. Examples are children from families with a medical background. In addition, Prof. Dr. Berg suggested that pupils who did their A-level at an independent school make the decision more for a private university instead of a state university.

Answer of Prof. Dr. Berg to question number four: How constitutes private Business Schools success?

Prof Dr. Berg put forward that alumni are an important success factor. Alumni who work for an interesting employer get used for advertisement campaign to recruit interested students. Furthermore, other important success factors are the facilities of a private university. For students are the location, the high quality of the building and the quality of the classrooms important. Students and their parents want to have value for the tuition fees. Prof. Dr. Berg criticised the expectations of students and parents. Most students expect that the career center will help them to find them a good job and write application etc. On the other hand, is the international office a success factor at private university. Private universities demonstrate their internationality with relationships to other universities worldwide. To organise exchange programmes and to place the partnerships in public/university fairs or brochures supports the student recruiting process.

Accreditations as another success factor were highlighted by Prof. Dr. Berg. Especially private universities are using accreditations to distinguish them from other private institutions. Accreditations emphasise the quality of an institution and helps interested students by their decision for a private university. However, most of the bachelor students are not used to the accreditation systems and do not know about the quality requirements which private universities have to consider. Because of that, private universities have to point out their uniqueness by having good accreditations. Another success factor which private universities often highlight is the strong mentoring of students. Prof. Dr. Berg argued that a good mentoring by academic staff has to be denied at private universities in Germany. Most of the academic staff are free-lancer, just get paid for the lesson and have no office. Therefore, the fluctuation rate of academic staff is high.

Answer of Prof. Dr. Berg to question number five: Which instruments are from your point of view promising to gain students for a Business School?

Prof Dr. Berg emphasised that for private universities are university fairs, advertisements in the press and glossy brochures with successful and handsome students, strong marketing instruments. Private universities try to suggest with glossy brochures seriousness. Furthermore, referred Prof. Dr. Berg to the acceptance test of private universities for interested students and

ask the question how many of them will not pass the acceptance test? That implicates that the acceptance test just will show seriousness and quality. Nevertheless, Prof. Dr. Berg mentioned that a few private universities use these test seriously to select their candidates.

Answer of Prof. Dr. Berg to question number six: Which instruments are from your point of view promising to retain students at a Business School?

Prof. Dr. Berg argued that the biggest problem for students is the shift between pupil and student at a state university. To work more independent, to organise themselves and to join consultation hours of professors are new steps for students. Solutions can be better information politic of the university and clear description of the study programme. To give students an overview about the study programme, difficulties but as well the advantages help to fulfill students' expectations. The biggest problem is often the difference between expectation and experience.

Summary of important aspects and criteria mentioned in the expert interview with Prof. Dr. Berg:

Prof. Dr. Berg mentioned that the most important criterion is the location of the university. To study nearby the parents' home or away is a key aspect. Other factors are the reputation of some universities about their degree programmes. Prof. Dr. Berg sees rankings as important marketing instrument. Image and the university as status symbol are other key reasons to choose a private or state university. Prof. Dr. Berg pointed out that glossy brochures and good promotional material have a strong influence in the decision process for a private university. Image plays a significant role at private universities but as well at state universities. Prof. Dr. Berg referred to the aspect that fewer students want to study at universities in East Germany. Employability and the reputation of the professors have been mentioned as important factors for private universities. Reasons are that students get taught by well-known managers and that private university have close links to companies. Negative aspects are the fluctuation rate of academic staff at private universities and the result of a bad atmosphere within the institution. Students often have to readjust themselves of new lecturer, who have no office at the university and are just accessible per mail. Facilities play a minor part in the decision process for or against a private university. As possible customer sees Prof. Dr. Berg students from wealthy families who did for example their A-levels at an independent school.

As important success factor was pointed out the career pathways of alumni. Prof. Dr. Berg emphasised that the career centre of private university are one important success factor. To establish strong and close links to companies, to enable students' internships, dual study programmes or jobs as student trainee are possible success criteria. However, have some students the behaviour that they expect the above mentioned service without good grades or personal engagement. Private universities are seen as service provider! In addition, good accreditations and partnerships show the quality and the internationality of a private university and can be used as indicators within the decision process. However, most of the students do not know the differences between good and bad accreditations. Private universities have to inform more in depth interested student about accreditations and the partnerships with universities abroad. As a negative aspect was the fluctuation rate of the academic staff highlighted at private universities.

Prof Dr. Berg emphasised that for private universities are university fairs, advertisements in the press and glossy brochures with successful and handsome students, strong marketing instruments. Prof. Dr. Berg pointed out that private universities try to create the impression of seriousness by highlighting their alumni in glossy brochures. It is important to inform interested students what they can expect from a state or private university. To minimise the difference between expectations and experiences will be one key component to keep students at universities.

Appendix 8: Summary of Important Variables, Marketing Activities and Instruments

Summary of important variables, marketing activities and instruments collected by the expert interviews

Name	Important Variables for a Private University	Less Important Variables	Comments	Marketing Instruments	Less Important Marketing Instruments
Dr. Lobin	network of a private university and increased employability after graduation/alumni network/small classes, mentoring, international orientation, partner universities (exchange)/close links to companies/lecturer who combine practical experiences with research/	Rankings are less important/	Dr. Lobin mentioned that Bachelor programmes are just interesting for German speaking students. Because most programmes are in German language! Master programmes are to recruit international students. Dr. Lobin pointed out that the social background plays not so an important role within the decision process for or against a private university. Parents from different social backgrounds want to enable their children a good education.	Most important marketing instruments are glossary brochures with success stories of students/alumni/In house activities and test weeks for interested students/target groups: different families with social background	Social media activities or university fairs are less important to recruit students.
Prof. Dr. Holtbrügge	Location of the university/nearby parents' home or away from parents home/employability after graduation/relationship between professors and students/a slight fluctuation rate/academic quality and the career pathways	Rankings are not a valid-indicator within the decision process of students.	Some students have to choose a university because of their weak A-levels. In contrary, some students choose because of their good A-levels well known universities/ Prof. Dr. Holtbrügge pointed out that most of students start choosing a specific university for their master degree.	Strong marketing instruments are school visits and test lectures at schools. To inform interested students in depth about the programme, possible career pathways and the network of the institution are tools which supports the decision process of pupils/target groups: mixture of different kind of families	Intensive advertisement campaigns of some private universities in print media or buses etc. have been criticised by Prof. Dr. Holtbrügge. Too much advertisement gives the impression that anybody can study at that institution.
Prof. Dr. Berg	Location of the university/nearby parents' home or away from parents home/reputation and image (status symbol) of the university/rankings are important/employability after graduation/career centre (Services) and international office are important factors	Facilities play a minor part within the decision process.	Prof. Dr. Berg pointed out that glossy brochures and good promotional material have a strong influence in the decision process for a private university/ negative aspect: high fluctuation rate of academic staff at private universities	Rankings are an important marketing instrument/glossary brochures and promotional material/university fairs/advertisement in the press/target groups: wealthy families	Prof. Dr. Berg pointed out that private universities try to create the impression of seriousness by highlighting their alumni in glossy brochures

(Source: Expert interviews - PhD Thesis Stephan Platz, 2014)